DOCUMENT RESUME

ED 355 434 CE 063 326

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TITLE Texas Quality Work Force Planning for the 21st Century. A Renewed Challenge for Education and Training Providers, Business, Industry, and Labor.
INSTITUTION Texas Education Agency, Austin.; Texas Higher Education Coordinating Board, Austin.; Texas State Dept. of Commerce, Austin.
PUB DATE Dec 92
NOTE 90p.; For a related document, see ED 330 392.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Articulation (Education); Cooperative Planning; *Economic Development; Educational Improvement; *Educational Needs; *Educational Planning; Educational Practices; Futures (of Society); *Institutional Cooperation; *Labor Force Development; Models; Postsecondary Education; School Business Relationship; Secondary Education; Statewide Planning; Technical Education; Vocational Education
IDENTIFIERS *Texas

ABSTRACT

A partnership among the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce was formed in 1987 to challenge representatives from education, training, business, industry, and labor to adopt a cooperative regional view of common needs and proposed solutions. As a result, 24 Quality Work Force Planning Committees were developed in 24 regions of the state. During the 1991-92 program year, the regions developed and implemented service delivery plans that had a number of effects: increased partnerships to support career and technical education and training programs; improved communication and dissemination of labor market information; and improved programs through provision of leadership, advocacy, and technical assistance. Projected outcomes of the cooperative planning include the following: (1) development of career path information for targeted occupations; (2) prominent involvement by business, industry, and labor in determining priorities for career and technical education; (3) increased efficiency and cost-effectiveness; (4) significant numbers of highly skilled workers trained in targeted occupations; (5) improved educational support for economic development; (6) models to assess skill standards and competencies; and (7) a statewide career guidance system based on regional labor market information. (Appendixes constituting approximately half the document provide the following: map of Quality Work Force Planning Regions, the Quality Work Force Planning rules, targeted industries and occupations by region, results from 12 of the regions, and comparison of Quality Work Force Planning committees and tech prep consortia.) Contains nine references. (KC)

ED355434

A Renewed Challenge for Education and Training Providers, Business, Industry, and Labor

TEXAS QUALITY WORK FORCE PLANNING FOR THE 21ST CENTURY

A Tri-Agency Initiative by the
Texas Education Agency
Texas Higher Education Coordinating Board
Texas Department of Commerce

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December 1992

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Texas Education Agency
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Acknowledgments

The Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce express their grateful appreciation to the chairpersons, members, and staff of the 24 regional Quality Work Force Planning Committees. Their dedicated efforts and hard work have demonstrated that Quality Work Force Planning can succeed at the grassroots level. The three agencies also express their appreciation to the Texas Employment Commission's Economic Research and Analysis Department for providing essential economic data for Committee analysis and to the State Occupational Information Coordinating Committee for providing training and assistance to Committees in the use and interpretation of SOCRATES, the automated regional labor market information system. Finally, the state agencies owe special thanks to Decision Information Resources, Inc., of Houston, Texas for insightful evaluations during the pilot project and early implementation phases and for thoughtful recommendations for improving Quality Work Force Planning.

EXECUTIVE SUMMARY

Texas must have a skilled and educated work force to compete successfully in the 21st Century global economy.

Texas must have a skilled and educated work force to compete successfully in the 21st Century global economy. Education and training providers, business, industry, and labor all have a stake in Texas' future. These two fundamental assumptions brought together more than 1,000 volunteers across Texas to participate in Quality Work Force Planning. Unique to our state, Quality Work Force Planning provides a systematic, data-driven method for identifying employer needs and a sound basis for improving career and technical education and training programs to meet student and adult learner needs.

Quality Work Force Planning began in 1987 as a series of pilot projects. In 1989, the Texas Legislature committed the state to develop an integrated delivery system through Quality Work Force Planning. Two years later it appropriated funds for the initiative. In response, the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce formed a tri-agency partnership to promote and implement Quality Work Force Planning. The agencies challenged representatives from education, training, business, industry, and labor to adopt a new perspective: a cooperative regional view of common needs and proposed solutions. Texans stepped forward to establish 24 Quality Work Force Planning Committees that encompass all 254 counties of the state.

During the 1991-92 program year, the Committees developed and implemented service delivery plans that increased partnerships to support career and technical education and training programs, improved communication and dissemination of labor market information, and improved programs by providing leadership, advocacy, and technical assistance. Major Committee accomplishments include:

- identifying for the first time key industries and targeted occupations in all regions so that education and training providers will have the best available labor market information to use in program planning;
- coordinating efforts with newly formed Tech-Prep consortia throughout the state to ensure that all Tech-Prep High School and Associate Degree programs are based on regional targeted occupations;
- providing key industries and targeted occupations information to Job Training Partnership Act private industry councils for use in federal planning;

The Texas approach to achieving a quality work force has earned our state national recognition for improving coordination between career and technical education and training programs.

- initial work in identifying key skills for targeted occupations and providing critical feedback to schools for improving curriculum; and
- start-up of new courses based on labor market demand, including health occupations, electronics, office systems technology, and precision production.

The Texas approach to achieving a quality work force has earned our state national recognition for improving coordination between career and technical education and training programs. In addition, it has been studied and often cited as unique in its comprehensive approach to the work force development agenda. This recognition was based on the achievements and pioneering efforts of nine pilot projects. With Quality Work Force Planning successfully implemented statewide, the 24 Committees now provide leadership, advocacy, and assistance that will generate long-term, successful outcomes:

- development of career path information for targeted occupations;
- prominent involvement by business, industry, and labor to determine priorities for career and technical education and training programs and related skills to be taught;
- increased efficiency and cost-effectiveness of matching and delivering training for targeted occupations;
- reduction in unnecessary program duplication;
- significant numbers of highly skilled workers trained for targeted occupations; and
- improved educational support for economic development.

Quality Work Force Planning is the unifying strategy for an integrated education and training system in Texas. The 24 Committees form a basic infrastructure to focus on a shared vision for Texas work force development. This approach improves program coordination and links goals, objectives, and activities that promote attainment of that vision. To improve Quality Work Force Planning, the tri-agency partnership has identified future joint efforts to develop:

- a statewide model to identify, validate, and disseminate industry skill standards and certifications including SCANS competencies for curriculum improvement;
- local models for one-stop client assessment and referral for education and training;
- a statewide career guidance and information system based on regional labor market information from SOCRATES; and
- an expanded, automated student and adult learner follow-up system using Unemployment Insurance wage-record data.

Texans were challenged to implement Quality Work Force Planning.

The Governor has also initiated the Smart Jobs plan which recommends that the Texas Legislature create a fund to pay for training and retraining the current work force in high-skill, high-wage "Smart Jobs."

In 1991, Texans were challenged to implement Quality Work Force Planning. They demonstrated tremendous initiative to meet that call. Today, education and training providers, business, industry, and labor face a renewed challenge to continue active partnerships which address the needs of employers for an internationally competitive work force and which address the needs of students for education and training that will prepare them for employment in the 21st Century.

RENEWED CHALLENGE

The globalization of finance, capital, technology, and labor thrust the state's economy and work force into intense international competition.

Texas' economic strength and vitality in the year 2000 and beyond depends on the state's capacity to educate and train a quality work force. The globalization of finance, capital, technology, and labor thrust the state's economy and work force into intense international competition. Texas employers know that a highly skilled work force ensures greater productivity and the capacity to compete. Businesses can increase their markets and expand production, thus stimulating additional economic development for their region and the state. Only in a thriving economy can skilled workers earn the wages that maintain our prosperity.

The world is changing dramatically as we enter the Information Age. Computers and high-speed communications systems, coupled with international economic competition for goods and services, are transforming the way work will be performed in the future. Self-discipline, a desire to work, and a strong back were once the primary means for most workers to earn a decent living. At the turn of the century, America began an assembly line style of education to create a suitable work force for mass-production industry. Industry prospered without a highly skilled work force by breaking complex jobs into a myriad of simple, repetitive tasks to produce high-volume, inexpensive goods and services. Productivity increases were gained by putting more people to work. That strategy worked as long as the competition did not change its production methods and America's supply of new workers was inexhaustible.

During the past 20 years, disturbing trends emerged. Real average weekly earnings fell, and productivity growth slowed, endangering our standard of living. On most international tests, U.S. students ranked behind those in Europe, Asia, and some newly industrialized countries. Our competitors were working smarter. At the same time, the rate of new entrants to the U.S. work force peaked and then began to fall.

Since 1990, two important national commissions have issued reports documenting these trends and stimulating debate across the country. In *America's Choice: high skills or low wages!*, the Commission on the Skills of the American Workforce asserts that if American firms want to compete more effectively in the global economy, they must move to a high-performance work organization which requires highly skilled workers. This new form of work organization reduces bureaucracy by giving front-line workers more responsibility for using judgement and making decisions, from quality control to production scheduling. Work organizations like these will require large investments in training. Workers' pay levels should rise to levels commensurate with their improved skills, greater responsibilities, and rising productivity.

The Commission notes that 95 percent of U.S. companies still organize the workplace using the highly bureaucratic, mass-production model pioneered during the early 1900's. Most employers expect their workers to have few skills. Employees only have to be reliable and willing to follow simple instructions. Foreign competitors, however, are choosing to train highly skilled workers for high-performance work organizations. The Commission warns that Americans are making a potentially disastrous choice by default.

The choice that America faces is a choice between high skills and low wages.

> The choice that America faces is a choice between high skills and low wages. Gradually, silently, we are choosing low wages. We still have time to make the other choice—one that will lead us to a more prosperous future. To make this choice, we must fundamentally change our approach to work and education. (*America's Choice: high skills or low wages!*, p. 5)

The U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS) released a series of reports to encourage a high-performance economy characterized by high-skill, high-wage employment. The first volume, *What Work Requires of Schools*, defines five competencies and a three-part foundation for skills and personal qualities needed for productive job performance. A high-performance workplace demands workers who have a solid foundation in the traditional basic academic skills, in the thinking skills necessary to put knowledge to work, and in the personal characteristics that make a worker confident, trustworthy, and responsible. High-performance workplaces also require the ability to manage resources, to work amicably and productively with others, to acquire and use information, to understand and master complex systems, and to work comfortably with a variety of technologies. Together the five competencies and three-part foundation of skills and personal qualities make up what is called "workplace know-how."

Before these reports were issued, Texas began a unique experiment. In 1987, representatives from education and training providers, business, industry, and labor came together at the regional level to address the needs of employers for a skilled and educated work force and the needs of students for education and training based upon labor market analysis. The Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce jointly funded a series of pilot projects for a grassroots regional planning initiative, which became known as Quality Work Force Planning. The projects achieved national recognition, and in 1989, the 71st Texas Legislature authorized the establishment of 24 Quality Work Force Planning Committees throughout the state. In 1991, the 72nd Texas Legislature provided funds to pay Committee operating expenses.

Change, the reality of the 21st Century, challenges Quality Work Force Planning Committees to sustain growth and renewal.

Quality Work Force Planning is extraordinary in its size and scope. Three major state agencies cooperatively oversee and fund 24 Committees that encompass Texas' 1,059 public independent school districts, 54 public community and technical colleges, and 35 Job Training Partnership Act private industry councils. More than 1,000 representatives from education and training providers, business, industry, and labor participate in Quality Work Force Planning Committee activities.

In Texas, the Governor directed the State Job Training Coordinating Council to develop a Smart Jobs Training Plan for creating a world-class work force in Texas as it moves toward a high-skill, high-wage strategy. The October 1992 draft of the plan recognized that the Quality Work Force Planning initiative supports this strategy and recommended that the Governor make the initiative one of her priorities in the state's legislative, budget, and policy development processes.

In September 1990, the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce distributed a jointly written report, *Texas Quality Work Force Planning: Preparing Texas for the 21st Century Through a Skilled and Educated Work Force*. That report documented the efforts of nine pilot projects to develop the Quality Work Force Planning model. This new report, *Texas Quality Work Force Planning for the 21st Century: A Renewed Challenge for Education and Training Providers, Business, Industry, and Labor*, builds upon the previous document by presenting the efforts of the 24 Committees and three state agencies during the 1990-91 and 1991-92 years.

Change, the reality of the 21st Century, challenges Quality Work Force Planning Committees to sustain growth and renewal. They must continue providing an effective grassroots forum for education and training providers, business, industry, and labor to work cooperatively in meeting the needs of employers and students. Committee members will change. Labor markets will change. The needs of employers and students also will change. Educational systems must respond by changing too. Quality Work Force Planning provides a comprehensive, flexible approach to identify changing labor markets and to generate responsive educational and training program improvement. The dedicated efforts of Texans will be the key to its success. Improved productivity, competitiveness, and prosperity for Texas will be everyone's reward.

BACKGROUND

In 1987, two key reports provided the basis for a statewide initiative in regional planning for a quality work force. The original *Master Plan for Voc[illegible]onal Education*, developed in response to the educational reforms brought about by HB 72, called for pilot projects to explore the feasibility of regional planning for vocational-technical education. The *Report of the Select Committee for Higher Education* emphasized that vocational-technical education must be responsive to rapidly changing job markets, adaptable to new training technologies, and flexible for individual student needs. For this reason, the Select Committee for Higher Education recommended partnerships with business, industry, and labor for effective local and regional planning.

The original Master Plan for Vocational Education . . . *called for pilot projects to explore the feasibility of regional planning for vocational-technical education.*

In 1988, the Governor's Task Force on Vocational Education recommended that Texas develop an integrated vocational-technical education delivery system beginning with effective regional planning to establish priorities for vocational-technical education. The Strategic Economic Policy Commission also addressed this issue in its 1989 report to the 71st Texas Legislature. One of the strategic objectives called for a skilled, competitive work force in Texas as the key to future economic growth and diversification. The 1989 and 1991 Master Plan updates provided additional directions for refining and implementing regional planning for vocational-technical education throughout the state.

LEGISLATIVE ACTION

In response, the 71st Texas Legislature passed a bill in 1989 that requires regional planning for vocational-technical education and training. The Texas Education Code was amended by adding Section 21.115, which ensures that:

- there will be 24 Quality Work Force Planning Regions that have the same boundaries as the current state planning regions delineated by the governor (see map in Appendix A);
- the membership of Quality Work Force Planning Committees must be established;
- priorities for vocational-technical education and training programs must be established for each region; and
- regional service delivery plans must be developed.

In 1987, the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce formed a tri-agency partnership to assist regions to initiate Quality Work Force Planning.

In 1991, after Quality Work Force Planning Committees were established in all 24 regions, the 72nd Texas Legislature amended the Texas Education code by adding Section 16.155(h), which authorizes funding for Committee operations. The Legislature appropriated $1.8 million for each year during the 1992-1993 biennium. Three funding sources were tapped: state general revenue funds; federal Job Training Partnership Act funds; and federal Carl D. Perkins Vocational and Applied Technology Education Act funds. Each Committee receives $75,000 per year, with funds provided from all three sources.

Tri-Agency Partnership

In 1987, the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce formed a tri-agency partnership to assist regions to initiate Quality Work Force Planning. Working together since then, the agencies cooperatively funded pilot projects in nine regions and adopted uniform rules and policies in 1990 to implement Quality Work Force Planning statewide (see Appendix B). The partnership initiated activities in 15 non-pilot regions in 1990 and early 1991 to establish functioning Committees. Since 1991, the tri-agency partnership has cooperatively funded and overseen the activities of all 24 Committees. Staff from the agencies formed a tri-agency management team that provides orientation sessions for new Committee members, trains Committee staff, gives on-site technical assistance, and publishes a statewide newsletter on Quality Work Force Planning-related issues and activities.

Pilot Projects

In December 1987, the tri-agency partnership used funds available under the Job Training Partnership Act and the Carl D. Perkins Vocational Education Act to sponsor pilot projects (see map in Appendix A for locations). These projects developed and tested a flexible Quality Work Force Planning model for statewide use. The first three projects were located in the Alamo, Northeast Texas, and Upper Rio Grande regions. In November 1988, three additional projects were funded in the Heart of Texas region, the North Central Texas region, and the Panhandle region. Three more projects were funded in September 1989 in the Capital region, the East Texas region, and the South Plains region. Funding in amounts ranging from $50,000 - $75,000 per region was provided through June 1991.

The pilot projects successfully achieved the following major objectives, in that they:

- established Quality Work Force Planning Committees with representation from education and training providers, business, industry, and labor;
- implemented SOCRATES, the automated regional labor market information system developed by the State Occupational Information Coordinating Committee with funds from the Texas Department of Commerce;
- identified key regional industries with the greatest potential for future employment growth;
- developed lists of targeted occupations for education and training based upon regional industrial analysis;
- compiled regional inventories of education and training programs and economic development organizations for use in the planning process; and
- developed and implemented regional service delivery plans based upon targeted occupations and related programs, services, and activities.

The pioneering efforts of project Committee members and staff demonstrated that grassroots Quality Work Force Planning works.

The pioneering efforts of project Committee members and staff demonstrated that grassroots Quality Work Force Planning works.

National Recognition

Texas achieved national recognition in July 1991 for its Quality Work Force Planning initiative from the U.S. Departments of Education, Labor, and Health and Human Services. These agencies jointly sponsored a national conference entitled "Making the Connection: Coordinating Education and Training for a Skilled Work Force." Invited to the conference were one representative from the governor's office, secondary education, public community and technical colleges, adult education, the Job Training Partnership Act, and the Job Opportunities and Basic Skills Training program from each state. Delegates discussed program coordination issues and listened to how other states have solved related problems. Texas was one of six states featured for having conducted successful projects to improve coordination between career and technical education and training programs. The tri-agency management team discussed the Quality Work Force Planning model, the experiences of several pilot projects, and statewide implementation efforts.

The 1991 National Occupational Information Coordinating Committee award for special achievement in the development and delivery of program planning information was given to the Texas State Occupational Information Coordinating Committee for the development of the SOCRATES labor market information system.

Quality Work Force Planning also has been featured at meetings of the following organizations:

- National Governors' Association—1990;
- National Council for Occupational Education—1991;
- National Council of State Directors of Community/Junior Colleges—1991;
- Southern Regional Education Board—1992;
- League for Innovation in the Community College—1992; and
- National Center on the Educational Quality of the Work Force—1992.

Furthermore, in 1992, the tri-agency management team met in Austin with federal education representatives from Mexico to discuss the implications of Quality Work Force Planning for that country and its efforts to decentralize technical education and training.

The 1991 National Occupational Information Coordinating Committee award for special achievement in the development and delivery of program planning information was given to the Texas State Occupational Information Coordinating Committee for the development of the SOCRATES labor market information system. Acknowledged in the award presentation was their outstanding innovation in the use of a wide range of data elements, analytic tools, and automated delivery methods to improve career and technical education and training.

A Refined Planning Model

The nine pilot projects achieved their objectives by developing the Quality Work Force Planning model, which has been refined with time and experience (see Figure 1). On paper, the model appears rather simple. In practice, newly formed Committees faced tremendous challenges during their first year. The 15 non-pilot Committees initiated operations for the first time during the 1991-92 year.

This partnership involves the formation of a Quality Work Force Planning Committee comprised of regional representatives: 50 percent from education and training providers and 50 percent from business, industry, and labor.

Step One:
Generate an Ongoing, Active Partnership

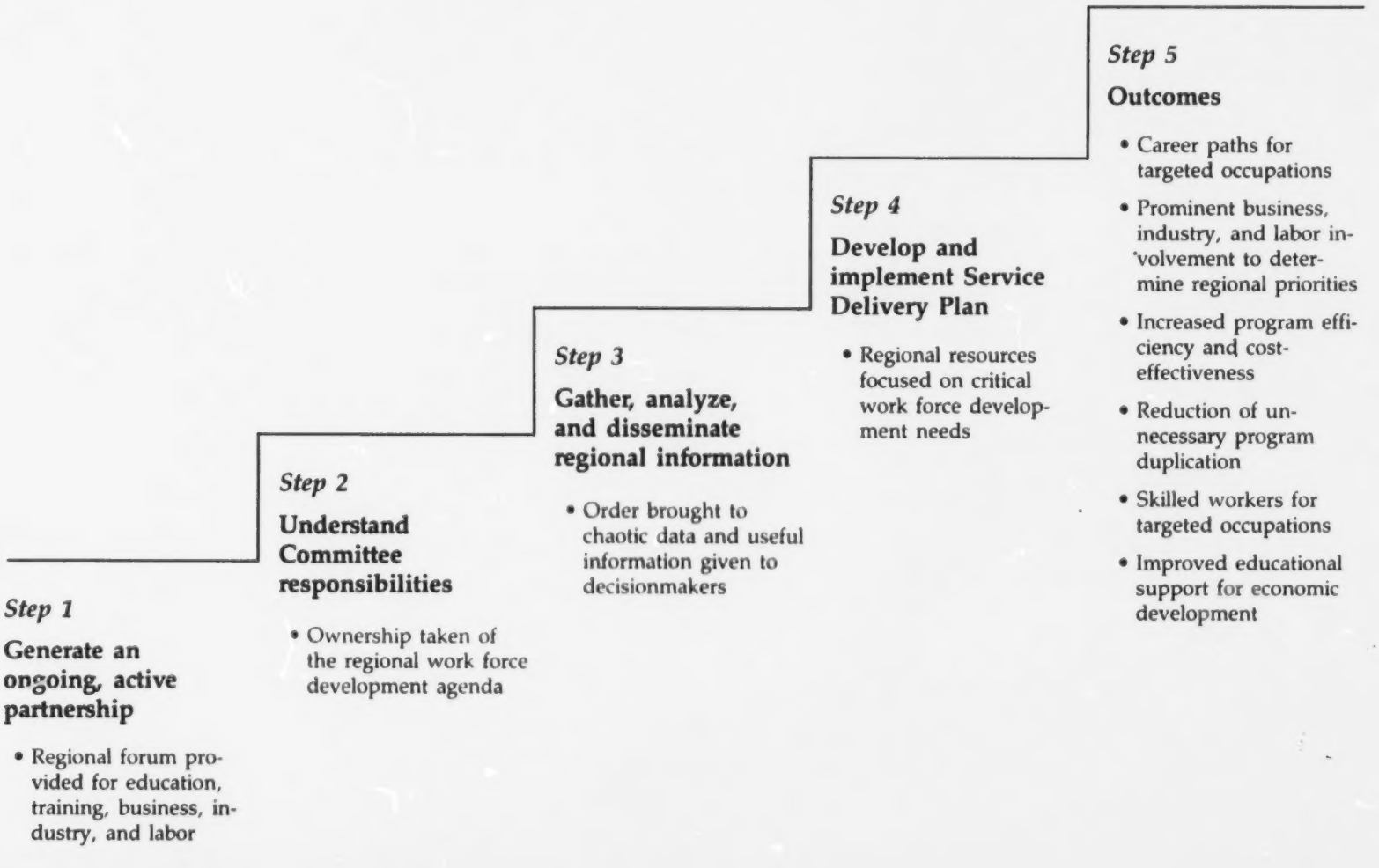
Generating an ongoing, active regional partnership is the first step in the model. This partnership involves the formation of a Quality Work Force Planning Committee comprised of regional representatives: 50 percent from education and training providers and 50 percent from business, industry, and labor. To be an effective regional forum, a Committee's members must be broadly representative of the region's geographic diversity, racial/ethnic composition, and gender balance.

Voting members from the education and public sector should comprise half of each Committee and include representatives from:

- public independent school districts;
- education service centers;
- Job Training Partnership Act/private industry council system;
- public community and junior colleges;
- Texas State Technical College System;
- public senior colleges and universities;
- public health science centers;
- Texas Engineering Extension Service;
- adult education cooperatives; and
- apprenticeship programs.

Representatives from private colleges and universities, private providers of career and technical education programs, the Texas Employment Commission, the Texas Innovation Network System, and other interested public sector entities may be included as voting members at Committee discretion.

Figure 1
Quality Work Force Planning Model


Step 1
Generate an ongoing, active partnership
• Regional forum provided for education, training, business, industry, and labor
Step 2
Understand Committee responsibilities
• Ownership taken of the regional work force development agenda
Step 3
Gather, analyze, and disseminate regional information
• Order brought to chaotic data and useful information given to decisionmakers
Step 4
Develop and implement Service Delivery Plan
• Regional resources focused on critical work force development needs
Step 5
Outcomes
• Career paths for targeted occupations
• Prominent business, industry, and labor involvement to determine regional priorities
• Increased program efficiency and cost-effectiveness
• Reduction of unnecessary program duplication
• Skilled workers for targeted occupations
• Improved educational support for economic development

Voting members from the private sector also should comprise half of each Committee and include representatives from:

- large and small firms;
- business and trade associations;
- labor organizations; and
- economic development organizations.

The number of voting members on a Committee varies, but most Committees have between 30-40 members. Committees typically increase regional input by including non-voting members on task forces to address specific issues. These task forces may double effective Committee size in some regions.

Committees have learned that recruiting members is a recurring task. They must recruit members who are both representative of the region and willing to contribute significant time and effort. Finding volunteers who are willing to work and who are influential within the region requires extensive effort. Keeping them active and interested depends on demonstrating the Committees' short-term impact and long-range vision.

During the second step, the Committee must understand its responsibilities within the region by taking ownership of the regional work force development agenda.

Step Two: Understand Committee Responsibilities

During the second step, the Committee must understand its responsibilities within the region by taking ownership of the regional work force development agenda. Each Committee acts as an important catalyst for change by providing:

- labor market information to assist program providers in making informed program improvement decisions; and
- a forum where representatives from education and training providers, business, industry, and labor meet to focus on the needs of employers for a skilled and educated work force and the needs of students for targeted education and training based upon labor market analysis.

Gaining full understanding of the tasks for step two generally requires from six to 18 months. Committees become increasingly productive with each year of operation.

Gathering, analyzing, and disseminating information about the region's labor market and career and technical education and training programs is the third step.

Committees do not have program approval authority. Instead, Quality Work Force Planning Committees meet their responsibilities by providing leadership, advocacy, and technical assistance to program providers.

STEP THREE: GATHER, ANALYZE, AND DISSEMINATE REGIONAL INFORMATION

Gathering, analyzing, and disseminating information about the region's labor market and career and technical education and training programs is the third step. During this step Committees bring order to chaotic data and provide useful information to decision-makers.

The State Occupational Information Coordinating Committee gives each Quality Work Force Planning Committee extensive national, state, and regional labor market data files. These files include regional industry employment data from the Texas Employment Commission and career and technical education program data from the Texas Education Agency and the Texas Higher Education Coordinating Board. Committees use these data to generate working lists of:

- key regional industries with the greatest job growth potential;
- targeted occupations within key regional industries; and
- career and technical education programs, including those that train for targeted occupations.

In addition, by collecting information throughout their regions, Committees develop lists of:

- adult education and literacy programs; and
- economic development organizations and services.

These inventories give Committee members basic information regarding current work force training and development needs and activities.

Analyzing key regional industries and targeted occupations is one of the most important activities conducted by Quality Work Force Planning Committees. They use a systematic, data-driven planning

method to identify those industries and occupations. SOCRATES, the automated regional labor market information system, is the underpinning of this planning method. Regional wisdom provided by Committee members plays an equally critical role in data interpretation and validation.

Quality Work Force Planning Committees play a vital role in providing labor market information to decisionmakers.

Quality Work Force Planning Committees play a vital role in providing labor market information to decisionmakers. Each year Committees must provide regional labor market analyses of key industries and targeted occupations to all public independent school districts, public institutions of higher education, private industry councils, and Tech-Prep consortia for use in program planning. Committees also provide labor market information upon request to education service centers, proprietary schools, economic development organizations, governmental agencies, and community-based organizations.

In 1992, each Quality Work Force Planning Committee and the region's private industry council(s) signed a memorandum of understanding which specifies that the Committee will provide the following labor market information from SOCRATES:

- planning information needed to complete Job Training Partnership Act occupational targeting tables for economically disadvantaged participants and dislocated workers;
- duties and tasks of and aptitudes and interests required to perform in targeted occupations;
- education and training program lists for targeted occupations;
- employer lists for the region's key industries; and
- forecasts that take into account the economic ripple effects of worker layoffs, plant closures, or business expansions.

Upon request, Committees also provide this information to any interested party. In addition, Committees can provide

- a list of key industries ranked by employment growth potential;
- industrial staffing patterns for key industries; and
- evaluations of current conditions for employment in targeted occupations.

In step four, each Quality Work Force Planning Committee develops and implements a service delivery plan that focuses regional resources on critical work force development needs.

See Appendix C for a detailed discussion of the planning method, the 1992 lists of key industries and targeted occupations for 24 regions, and an analysis of trends across Texas.

STEP FOUR: DEVELOP AND IMPLEMENT A SERVICE DELIVERY PLAN

In step four, each Quality Work Force Planning Committee develops and implements a service delivery plan that focuses regional resources on critical work force development needs. Plans are based on a critical subset of identified occupations, or clusters of occupations, taken from the list of targeted occupations developed in step three. By focusing on specific occupations, a Committee can concentrate more effectively the efforts of its members and staff. Plans are structured to have the following components:

- mission statement;
- goals;
- objectives related to each goal; and
- specific activities designed to meet each objective.

Committees are expected to implement plans that result in:

- partnerships to support career and technical education and training programs, services, and activities;
- improved communication and dissemination of information within the region; and
- improvement of career and technical education programs.

Partnerships to support career and technical education and training programs should include:

- development of program articulation agreements to reduce unnecessary program duplication and increase program efficiency, such as 2+2+2 programs, and coordination with Tech-Prep High School and Associate Degree programs;
- development of resource sharing agreements, such as contracted instruction or use of state-of-the-art equipment, among education and training providers, private industry councils, business, industry, and labor; and

- coordination with at-risk, adult education, and literacy programs by giving labor market information to program providers so they can assist students in making informed career decisions.

Communication and dissemination of information within the region should be improved among:

- education and training providers and employers by sharing ideas to improve the quality of career and technical education and training programs; and
- education and training providers and economic development organizations to meet the region's future employment training needs.

A long-range objective of Quality Work Force Planning is for public independent school districts, public institutions of higher education, and private industry councils to improve career and technical education and training programs in response to the leadership, advocacy, and technical assistance provided by Committees. Improvement will occur through processes of:

- new program initiation;
- existing program revision or redirection; and
- program deactivation.

For the period July 1, 1991, through June 30, 1992, Committees developed and implemented one-year transitional plans. For the 15 non-pilot Committees, these plans were initial attempts at organizing Committee activities, analyzing regional labor markets, forming partnerships, improving communication, and improving programs. For the nine former pilot Committees, these plans continued earlier activities. Beginning July 1, 1992, all 24 Quality Work Force Planning Committees began implementing two-year service delivery plans. In the future, new plans will be developed and implementation will begin on July 1 of succeeding even-numbered years.

The fifth step in the model, successful outcomes, results from the implementation of service delivery plans.

Step Five: Successful Outcomes

The fifth step in the model, successful outcomes, results from the implementation of service delivery plans. These outcomes, while ambitious in nature and broad in scope, are vital to achieving an integrated delivery system in Texas. All Quality Work Force Planning Committees should strive to achieve these six outcomes:

This planning model and the experience of the pilot projects provided the basis for rules on the statewide implementation of Quality Work Force Planning that were developed and adopted by the tri-agency partnership.

- development of career path information for targeted occupations;
- prominent involvement by business, industry, and labor to determine priorities for career and technical education and training programs and related skills to be taught;
- increased efficiency and cost-effectiveness of matching and delivering training for targeted occupations;
- reduction in unnecessary program duplication; and
- significant numbers of highly skilled workers trained for targeted occupations;
- improved educational support for economic development.

This planning model and the experience of the pilot projects provided the basis for rules on the statewide implementation of Quality Work Force Planning that were developed and adopted by the tri-agency partnership (see Appendix B). The rules became effective September 1, 1990.

OUTCOME HIGHLIGHTS

Quality Work Force Planning Committees achieve outcomes by providing leadership, advocacy, and technical assistance.

Quality Work Force Planning Committees achieve outcomes by providing leadership, advocacy, and technical assistance. The planning model specifies Committees should provide a forum where representatives from education and training providers, business, industry, and labor meet to focus on the needs of employers for a skilled and educated work force and the needs of students for targeted education and training based upon labor market analysis. The model also specifies that Committees should provide labor market information to assist program providers in making informed planning decisions.

Subcommittees or specially formed task forces are the primary means by which Committees provide forums for change. They serve as catalysts by:

- contributing Committee member or staff technical assistance to education and training providers to facilitate program development;
- convening a network of employers and education and training providers to assist interested parties in developing programs;
- giving useful labor market information to education and training providers for use in making program improvement decisions; or
- endorsing program initiatives put forth by education and training providers.

To stimulate program improvement, the Committees must include a wide range of regional decisionmakers in their activities. An excellent example of how Committee task forces work is shown on the following page.

During 1991-92, the first year of full state funding, Quality Work Force Planning Committees conducted numerous activities, ranging from career days for students to meetings discussing regional labor markets and employer needs. Committee reports indicate that program decisions were impacted in most regions. Appendix D contains illustrative examples of program-related outcomes from 12 Committees selected to represent different areas of the state (North, South, East, West, and Central Texas).

How Do Committee Task Forces Work?

In 1987, a group of North Central Texas business and education leaders formed a regional planning committee in North Central Texas to address a broad spectrum of employment needs and related vocational-technical education and training capabilities. In 1988, the committee, with Dallas County Community College District serving as fiscal agent, was awarded a pilot project grant for Quality Work Force Planning by the tri-agency partnership. The committee, known as InterLink, incorporated as a public nonprofit organization, and now serves as the Quality Work Force Planning Committee for the region. The North Central Texas region, one of the state's largest, has five private industry councils, 32 college campuses, and 135 public independent school districts.

According to a study conducted by Texas Christian University for the North Texas Commission, the region is the largest aviation center in the United States. North Central Texas has three major airports, including DFW International Airport, the largest airport in the world. Aviation, aerospace manufacturing, and related businesses comprise a major percentage of the region's total employment. Excluding defense contracts, aviation alone has a $9.4 billion impact annually on the area economy.

Recognizing the need to create a region-wide educational network to meet the demands of a growing aviation industry, the Aviation cluster Industry Advisory Group at Skyline High School in Dallas joined InterLink in 1988 and formed the Aircraft Maintenance Skills Task Force. The task force's primary objective is to establish an educational network for the aircraft maintenance career field that will provide training for jobs ranging from technicians to executives.

Dick Atkins, owner of RAMCO Engineering Consulting, chairs the task force whose members represent regional aviation businesses. The task force is implementing a five year plan that involves working with representatives from aviation to develop an aviation awareness education program in schools. The program is scheduled to start in the 1993-1994 year in school districts that have volunteered to pilot test the effort.

InterLink's Aircraft Maintenance Skills Task Force has formed a successful partnership that includes the Aviation Travel Academy, Dalfort Aviation, Dallas County Community College District, Dallas Skyline High School, Fort Worth Paschal High School, Tarrant County Junior College, Texas Aero Tech, and the University of North Texas. Tarrant County Junior College has doubled the size of its aircraft maintenance program, and the Dallas County Community College District has initiated a new program at Mountain View College.

American Airlines has agreed to sponsor the aviation awareness education program. Support will be provided by regional firms including Aerospatiale, ARCO, Bell Helicopter, Boise Cascade, Dalfort Aviation, General Dynamics, International Aviation and Travel Academy, LTV, Ryder Aviall, and Texas Aero Tech. These firms will provide speakers, instructors, instructional materials, facilities, and facility tours. Ryder Airline Services and Ryder Aviall will sponsor the Annual Texas Aviation Maintenance Competition between students from 14 aircraft maintenance schools in Texas as a key task force activity.

The task force is also coordinating its activities with the North Texas Commission's Aviation Committee, which was formed to promote the North Central Texas area as a world aviation center. Task force chair Dick Atkins participates as the link between this economic development organization and InterLink to ensure that the commission has input into the development of the aviation awareness education program.

COORDINATION WITH TECH-PREP CONSORTIA

The Tech-Prep example demonstrates the impact that combining funding incentives with targeted occupations can have on program decisions.

Quality Work Force Planning has had a major impact on the development of the statewide Tech-Prep initiative in Texas. The tri-agency partnership used its Quality Work Force Planning experience to form a Tech-Prep tri-agency management team and to issue joint planning and implementation grants to consortia comprising schools, colleges, private industry councils, and representatives from business, industry, and labor. Under the terms of the tri-agency Carl D. Perkins Vocational and Applied Technology Education Act discretionary grants, the 25 Tech-Prep consortia develop curricula and implement programs based on targeted occupations identified by Quality Work Force Planning Committees. No other state has taken such extraordinary measures to ensure that these programs are based on similarly structured regional labor market analyses. The Tech-Prep example demonstrates the impact that combining funding incentives with targeted occupations can have on program decisions.

Each Tech-Prep High School and Associate Degree program requires intensive academic and technical studies beginning no later than the ninth grade and potentially leading to an advanced Associate of Applied Science degree from a community or technical college, with the possibility of a baccalaureate degree from a participating university. The development of career pathways with multiple entry and exit points is a key aspect of this initiative.

Tech-Prep consortia may function as subcommittees of Quality Work Force Planning Committees or as separate entities with reciprocal membership. In either case, the tri-agency partnership encourages strong linkages between the two entities through joint meetings, frequent information exchanges, and joint planning and policy development. The side-by-side table in Appendix E compares the scope of work for each entity and identifies coordination opportunities.

INDEPENDENT EVALUATION

Over 95 percent of pilot and non-pilot region Committee members who responded see Quality Work Force Planning Committees as an important source of data and information.

From 1988 through 1991, the tri-agency partnership contracted with Decision Information Resources, Inc., of Houston, Texas for an independent evaluation of the implementation and impact of Quality Work Force Planning. In 1991, this private consulting firm conducted regional on-site visits, personal interviews with selected Committee members and staff, and in-depth telephone surveys with 166 randomly selected Committee members from all 24 regions. As in previous evaluations, telephone survey respondents in 1991 continued to see Quality Work Force Planning as important and likely to be effective in the future. Specific survey findings indicate:

- over 95 percent of pilot and non-pilot region Committee members who responded see Quality Work Force Planning Committees as an important source of data and information;
- over 96 percent of the pilot region responding members believe the Quality Work Force Planning Committee is important as a coordinating entity in the region, and 90 percent of the non-pilot members responding believe the Committee is likely to become important as a coordinating entity; and
- over 91 percent of pilot respondents and 81 percent of non-pilot respondents believe the Quality Work Force Planning Committees will be effective in the future in reducing overlap, competition, and unnecessary duplication. (*Quality Work Force Planning in Texas*, p. 57)

Decision Information Resources documented several additional major findings:

- the decision of the 72nd Texas Legislature to allocate $1.8 million per year to support Quality Work Force Planning demonstrated the statewide support this initiative has gained since its beginning in 1987;
- the entity selected to facilitate Quality Work Force Planning activities in a region should be viewed, as much as possible, as an independent, objective entity with no favored ties to specific educational or training providers;
- the value of an active executive committee, functioning subcommittees, and time-limited task forces to address specific objectives were all demonstrated to be effective components to accomplish Quality Work Force Planning objectives;

- some Quality Work Force Planning Committees had increasingly direct impacts on program developments and outcomes as they acquired adequate staff resources, maintained an appropriate and active Committee makeup, and achieved legitimacy in the region;

- the Tech-Prep planning grants provided an important financial incentive for multiple-entity collaboration in program development at the regional level;

- staff of the Quality Work Force Planning Committees need a diverse set of skills for Committee administration, labor market analysis, educational program development, and public relations;

- state management staff assumed more of a partner role rather than that of an overseer, and their technical support was appreciated by Quality Work Force Planning staff, contact persons, and Committee members; and

- regional Quality Work Force Planning staff expressed an interest in the state taking greater leadership in encouraging active participation in Quality Work Force Planning activities by educational entities and private industry councils throughout the state. (*Quality Work Force Planning in Texas*, pp. i-ii)

Decision Information Resources also made the following recommendations:

- education and training providers must be given funding incentives by the state to encourage coordinated training in targeted occupations identified by Quality Work Force Planning Committees;

- in order for Quality Work Force Planning Committees to have maximum impact on program outcomes, they must have adequate financial resources and full legitimization in their region;

- state agencies should structure appropriate federal and state work force development programs and grant applications to require multiple-entity collaboration using the Quality Work Force Planning structure as a dissemination and coordinating point, where feasible;

Education and training providers must be given funding incentives by the state to encourage coordinated training in targeted occupations identified by Quality Work Force Planning Committees.

Ongoing support must be provided by the state to regions in conducting their labor market planning and analysis activities.

- state staff leadership is needed to enhance statewide awareness of Quality Work Force Planning and active educational entity and private industry council participation in Committee activities and planning processes;

- Quality Work Force Planning Committees should seek additional funding and support to enhance their activities beyond the state funding allocated to each region;

- ongoing recruitment and support activities are needed by regional staff to maintain active and diverse participation and involved leadership on Quality Work Force Planning Committees, especially from the private sector;

- state and regional staff should ensure that regional service delivery plans are realistic and achievable within the available resources, and the objectives in those plans should become the contractual obligations under which the Committee operates and is funded by the state;

- ongoing support must be provided by the state to regions in conducting their labor market planning and analysis activities; and

- Quality Work Force Planning Committees should seek to be involved in as many program outcomes as possible—including providing information, data, and assistance to other entities as well as directly developing and implementing appropriate programs. (*Quality Work Force Planning in Texas*, pp. ii-iii).

NEW DIRECTIONS

Quality Work Force Planning represents a unifying strategy for an integrated education and training system in Texas.

Quality Work Force Planning represents a unifying strategy for an integrated education and training system in Texas. Committees operate throughout Texas and provide an underpinning for informed decisionmaking. The Texas Higher Education Coordinating Board's program review guidelines for approval of new programs now require public community and technical colleges to demonstrate the relationship of proposed new programs to regionally targeted occupations identified by Quality Work Force Planning Committees and other regional labor market information. In 1993, the Texas Education Agency will include targeted occupations lists in vocational program funding applications so that school districts can use the information in the planning process. Also in 1993, the Texas Department of Commerce will require private industry councils to use Committee lists of targeted occupations as one of two data sources to justify training program participants for particular occupations.

To assist schools, colleges, private industry councils, and Quality Work Force Planning Committees in their work force development efforts, the tri-agency partnership will focus its joint activities for the immediate future on developing:

- a statewide model to identify, validate, and disseminate industry skill standards and certifications including SCANS competencies for curriculum improvement;
- local models for one-stop client assessment and referral for education and training;
- a statewide career guidance and information system based on regional labor market information from SOCRATES; and
- an expanded, automated student and adult learner follow-up system using Unemployment Insurance wage-record data.

These initiatives will be designed to improve the responsiveness of education and training providers to the needs of students, program participants, business, industry, and labor. They will also be designed to put useful labor market and career information into the hands of counselors, case managers, students, training program participants, and parents.

The development of a statewide model for identifying, validating, and disseminating industry skill standards and certification strategies will build upon the work of the Texas Skills Development Program and related federal research currently funded by the U.S.

The development of a statewide career guidance and information system will result in software for use by students and adult learners.

Departments of Education and Labor. Initial efforts will focus on developing curricula for industries which currently have specified skill standards. The curricula will incorporate SCANS competencies and will be validated regionally for statewide use.

The tri-agency partnership also will fund projects to develop local models for one stop client assessment and referral for education and training. Coordinated client intake, assessment, referral, and case management instruments will be designed and tested for use by education, training, and human services providers. The project will be conducted in three phases: (1) analysis of current intake, assessment, referral, and case management procedures; (2) professional development for key staff of program providers; and (3) development and testing of an integrated, client-oriented intake, assessment, referral, and case management system.

The development of a statewide career guidance and information system will result in software for use by students and adult learners. It will include state and regional information on occupations, skills, and education and training programs, thus permitting self-paced career decisionmaking. The system will use existing SOCRATES software and data bases and will incorporate recommendations from an evaluation study of the Career Information Delivery System.

The Texas Higher Education Coordinating Board, in cooperation with the Texas Education Agency and the Texas Department of Commerce, will expand the statewide community and technical college automated student and adult learner follow-up system to include former secondary, Tech-Prep, and Job Training Partnership Act program students and adult learners. Education and training providers and business, industry, and labor will have the information they need to assess program effectiveness in preparing individuals for paid employment or continued higher education. Students and their parents will have the information they need to form reasonable expectations about the potential benefits of each education and training option available to them.

CONCLUSION

In 1989, the Texas Legislature committed the state to Quality Work Force Planning as a tool for implementing an integrated delivery system that would support the development of a skilled and educated work force. The Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce formed a tri-agency partnership to conduct pilot projects and develop a grassroots planning model. Uniform rules and policies based on these projects were adopted in 1990 by all three agencies and were used to guide statewide implementation. In 1991, the Texas Legislature demonstrated its continued commitment to Quality Work Force Planning by appropriating funds for the effort. Quality Work Force Planning Committees now operate throughout Texas, involving over 1,000 volunteers dedicated to creating a career and technical education and training system more responsive to the needs of employers for internationally competitive, educated and skilled workers. Unique to Texas, Quality Work Force Planning is the crucial link between identifying employer needs and ensuring that students who complete career and technical education and training programs are prepared for employment in the 21st Century.

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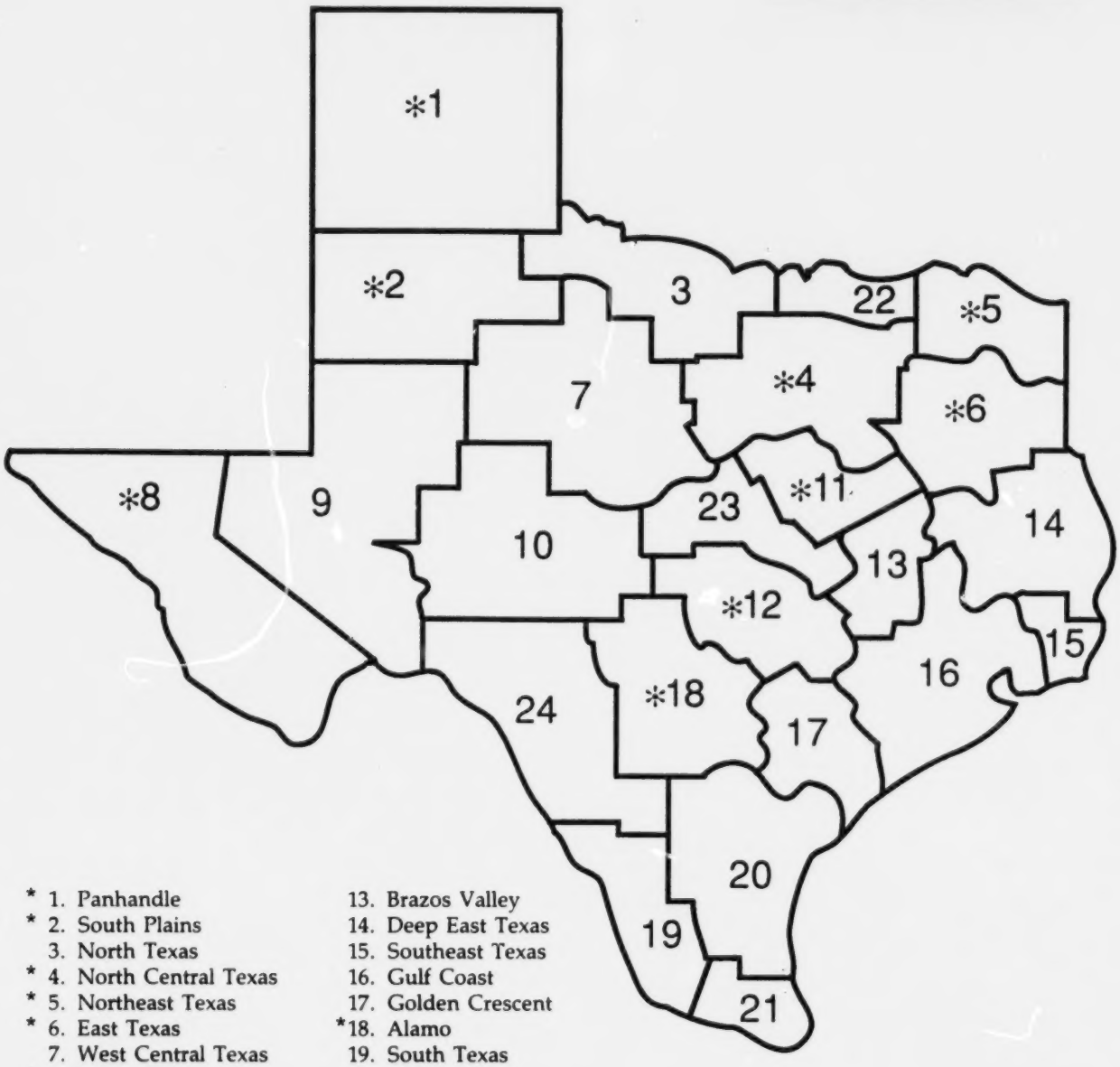
APPENDIX A

QUALITY WORK FORCE PLANNING REGIONS

Quality Work Force Planning Regions



* 1. Panhandle
* 2. South Plains
3. North Texas
* 4. North Central Texas
* 5. Northeast Texas
* 6. East Texas
7. West Central Texas
* 8. Upper Rio Grande
9. Permian Basin
10. Concho Valley
*11. Heart of Texas
*12. Capital
13. Brazos Valley
14. Deep East Texas
15. Southeast Texas
16. Gulf Coast
17. Golden Crescent
*18. Alamo
19. South Texas
20. Coastal Bend
21. Lower Rio Grande Valley
22. Texoma
23. Central Texas
24. Middle Rio Grande

*Pilot Projects

Texas Counties and Quality Work Force Planning Regions

County	Region Number	County	Region Number	County	Region Number	County	Region Number
Anderson	6	Eastland	7	Kerr	18	Rockwall	4
Andrews	9	Ector	9	Kimble	10	Runnels	7
Angelina	14	Edwards	24	King	2	Rusk	6
Aransas	20	Ellis	4	Kinney	24	Sabine	14
Archer	3	El Paso	8	Kleberg	20	San Augustine	14
Armstrong	1	Erath	4	Knox	7	San Jacinto	14
Atascosa	18	Falls	11	Lamar	5	San Patricio	20
Austin	16	Fannin	22	Lamb	2	San Saba	23
Bailey	2	Fayette	12	Lampasas	23	Schleicher	10
Bandera	18	Fisher	7	La Salle	24	Scurry	7
Bastrop	12	Floyd	2	Lavaca	17	Shackelford	7
Baylor	3	Foard	3	Lee	12	Shelby	14
Bee	20	Fort Bend	16	Leon	13	Sherman	1
Bell	23	Franklin	5	Liberty	16	Smith	6
Bexar	18	Freestone	11	Limestone	11	Somervell	4
Blanco	12	Frio	18	Lipscomb	1	Starr	19
Borden	9	Gaines	9	Live Oak	20	Stephens	7
Bosque	11	Galveston	16	Llano	12	Sterling	10
Bowie	5	Garza	2	Loving	9	Stonewall	7
Brazoria	16	Gillespie	18	Lubbock	2	Sutton	10
Brazos	13	Glasscock	9	Lynn	2	Swisher	1
Brewster	8	Goliad	17	McCulloch	10	Tarrant	4
Briscoe	1	Gonzales	17	McLennan	11	Taylor	7
Brooks	20	Gray	1	McMullen	20	Terrell	9
Brown	7	Grayson	22	Madison	13	Terry	2
Burleson	13	Gregg	6	Marion	6	Throckmorton	7
Burnet	12	Grimes	13	Martin	9	Titus	5
Caldwell	12	Guadalupe	18	Mason	10	Tom Green	10
Calhoun	17	Hale	2	Matagorda	16	Travis	12
Callahan	7	Hall	1	Maverick	24	Trinity	14
Cameron	21	Hamilton	23	Medina	18	Tyler	14
Camp	6	Hansford	1	Menard	10	Upshur	6
Carson	1	Hardeman	3	Midland	9	Upton	9
Cass	5	Hardin	15	Milam	23	Uvalde	24
Castro	1	Harris	16	Mills	23	Val Verde	24
Chambers	16	Harrison	6	Mitchell	7	Van Zandt	6
Cherokee	6	Hartley	1	Montague	3	Victoria	17
Childress	1	Haskell	7	Montgomery	16	Walker	16
Clay	3	Hays	12	Moore	1	Waller	16
Cochran	2	Hemphill	1	Morris	5	Ward	9
Coke	10	Henderson	6	Motley	2	Washington	13
Coleman	7	Hidalgo	21	Nacogdoches	14	Webb	19
Collin	4	Hill	11	Navarro	4	Wharton	16
Collingsworth	1	Hockley	2	Newton	14	Wheeler	1
Colorado	16	Hood	4	Nolan	7	Wichita	3
Comal	18	Hopkins	5	Nueces	20	Wilbarger	3
Comanche	7	Houston	14	Ochiltree	1	Willacy	21
Concho	10	Howard	9	Oldham	1	Williamson	12
Cooke	22	Hudspeth	8	Orange	15	Wilson	18
Coryell	23	Hunt	4	Palo Pinto	4	Winkler	9
Cottle	3	Hutchinson	1	Panola	6	Wise	4
Crane	9	Irion	10	Parker	4	Wood	6
Crockett	10	Jack	3	Parmer	1	Yoakum	2
Crosby	2	Jackson	17	Pecos	9	Young	3
Culberson	8	Jasper	14	Polk	14	Zapata	19
Dallam	1	Jeff Davis	8	Potter	1	Zavala	24
Dallas	4	Jefferson	15	Presidio	8		
Dawson	9	Jim Hogg	19	Rains	6		
Deaf Smith	1	Jim Wells	20	Randall	1		
Delta	5	Johnson	4	Reagan	10		
Denton	4	Jones	7	Real	24		
DeWitt	17	Karnes	18	Red River	5		
Dickens	2	Kaufman	4	Reeves	9		
Dimmit	24	Kendall	18	Refugio	20		
Donley	1	Kenedy	20	Roberts	1		
Duval	20	Kent	7	Robertson	13		

APPENDIX B

QUALITY WORK FORCE PLANNING RULES

19 TAC Chapter 78, Subchapter B, *Quality Work Force Planning**

§78.70 *Integrated Vocational-Technical Education and Training Delivery System for a Quality Work Force.*

Statutory Citation

Texas Education Code, §21.115

"(a) The master plan for vocational education under Section §21.113 of this code shall provide for an integrated delivery system that is designed to:

(1) meet local, regional, and statewide needs for vocational education programs;

(2) provide vocational education services in a systematic, nonduplicative manner;

(3) determine priorities for vocational education program offerings in each service delivery region established under this section; and

(4) maintain a central data base on all institutions, both public and private, that provide vocational education.

"(b) The State Board of Education shall provide in the master plan for the establishment of vocational education service delivery regions throughout the state. The regions shall have the same boundaries as the state planning regions delineated by the governor.

"(c) The State Board of Education shall establish in the master plan:

(1) priorities for local, regional, and statewide service plans; and

(2) the composition of regional planning committees that shall coordinate service delivery in each region."

Rule

(a) **Purpose.** Texas must develop a skilled and educated work force to enhance economic development in this state and to compete in a global economy. An integrated delivery system for vocational-technical education and training would ensure that the skills attained by graduates and completers of education and training programs match the skills needed by employers. The purpose of quality work force planning shall be to determine priorities for vocational-technical

*The State Job Training Coordinating Council recommended approval of the rules as state Job Training Partnership Act policy to the governor on May 31, 1990. The State Board of Education adopted the rules on June 9, 1990. The Texas Higher Education Coordinating Board adopted the rules on July 13, 1990.

education programs in the state's 24 planning regions. Planning committees shall develop partnerships of employers and educators to analyze regional job opportunities and education and training needs.

(b) **Regional boundaries.** Effective September 1, 1990, 24 quality work force planning regions shall be established that have boundaries coterminous with the governor's state planning regions.

(c) **Partnership.** Public school districts, education service centers, public community/junior colleges and technical institutes, public senior colleges and universities, other public institutions of higher education, and the Job Training Partnership Act/private industry council system shall work together to form a partnership with business and industry to address the issue of developing a skilled and educated work force. Private colleges and universities, private providers of vocational-technical education programs, and other interested public sector entities may be active participants.

(d) **Quality Work Force Planning Committees.** Effective September 1, 1990, a quality work force planning committee shall be initiated in each region. Each committee shall facilitate the development of an integrated delivery system for vocational-technical education and training. Each committee shall identify education and training providers, consistent with their role and mission, for vocational-technical education programs in the region so that programs will be delivered in a cost-effective and systematic manner that avoids unnecessary duplication. Each committee shall provide a planning forum to:

(1) address the needs of employers for a skilled and educated work force;

(2) address the needs of students, including members of special population groups, for occupationally specific vocational-technical education programs based upon current and projected labor market needs and related secondary occupationally non-specific vocational-technical education programs, services, and activities;

(3) promote partnerships that support vocational-technical education programs, services, and activities that result in:

(A) program articulation and 2+2+2 programs;

(B) resource sharing among education and training providers and with business and industry;

(C) coordination with dropout, adult education, and literacy programs; and

(4) improve communication within the region among:

(A) education and training providers and employers by sharing ideas to improve the quality of vocational-technical education programs; and

(B) education and training providers and economic development organizations to meet the region's future employment training needs.

(e) **Establishment of committees.** Only one quality work force planning committee shall be established in each region. The tri-agency partnership identified in subsection (m) of this section shall initiate activities within each region to establish the committee. A newly formed or existing entity that meets the committee membership criteria found in subsection (j) of this section, and that has adopted bylaws as specified in subsection (k) of this section, may petition the tri-agency

partnership to be designated as the quality work force planning committee for the region. The chief executives of each agency of the tri-agency partnership shall determine if membership and bylaw requirements are met and grant official status to the committee.

(f) **Regional labor market information system.** Each quality work force planning committee shall establish a regional labor market information system for use in program planning. Data from the state labor market information system shall be used as a primary source. Other reliable data sources may be used to augment these primary data provided that data standards are compatible with those identified by the State Occupational Information Coordinating Committee (SOICC). Each committee shall use the flexible planning methodology developed by the State Occupational Information Coordinating Committee to produce and periodically update:

(1) an inventory of key regional industries with the greatest job opening potential; and

(2) an inventory of targeted occupations, within key regional industries. The committee shall identify targeted occupations based upon: projected average annual job openings, positive growth-to-replacement ratios, specific vocational preparation training times, and other appropriate labor market variables. The committee shall have discretion to establish the parameters used for each variable. The committee shall give consideration to new and emerging occupations using the methodology developed by the Texas Innovation Information Network System.

(g) **Regional program and economic development inventories.** Each quality work force planning committee shall establish and periodically update the following inventories for use in planning:

(1) an inventory of occupationally specific secondary, postsecondary, adult, and proprietary school vocational-technical education programs, including apprenticeship programs, using data provided by the Central Education Agency and the Texas Higher Education Coordinating Board;

(2) an inventory of secondary occupationally non-specific vocational-technical education programs, using data provided by the Central Education Agency;

(3) an inventory of adult education and literacy programs; and

(4) an inventory of economic development organizations and services.

(h) **Regional inventory of vocational-technical education and training programs for targeted occupations.** Each quality work force planning committee shall develop an inventory of vocational-technical education and training programs for the targeted occupations identified under subsection (f)(2) of this section. When developing the inventory, the committee shall assess the match between existing vocational-technical education program supply and existing and projected occupational demand in the region.

(i) **Service delivery plan.** Each quality work force planning committee shall develop a service delivery plan for its region to address the responsibilities specified under subsection (d) of this section.

(1) The plan shall contain a mission statement, goals, objectives related to each goal, and specific activities designed to meet each objective.

(2) The plan shall identify priorities for vocational-technical education programs in the region, taking into consideration information from the regional inventories developed under subsections (f), (g), and (h) of this section and the statewide list of priority occupations. The plan shall be in accordance with vocational-technical education planning rules and regulations of the Central Education Agency and the Texas Higher Education Coordinating Board.

(3) A transitional one-year plan for the period July 1, 1991, through June 30, 1992, will be developed prior to July 1, 1991. A copy of the plan shall be provided prior to July 1, 1991, to the tri-agency partnership established under subsection (m) of this section.

(4) A two-year plan for the period July 1, 1992, through June 30, 1994, will be developed prior to July 1, 1992. Subsequent two-year plans will be developed prior to July 1 of even-numbered years. A copy of the plan shall be provided prior to July 1 of even-numbered years beginning in 1992 to the tri-agency partnership established under subsection (m) of this section.

(j) **Committee membership.** Each quality work force planning committee shall have an equal percentage of membership from the education and public sectors and from the business and industry sectors. The committee may be a newly formed or an existing entity that meets the following membership characteristics.

(1) Voting members from the education and public sectors shall comprise 50 percent of the committee. These members shall include participants from the region who represent: public school districts; education service centers; public community/junior colleges; the Texas State Technical Institute System; public senior colleges and universities; public health science centers; the Texas Engineering Extension Service; the Job Training Partnership Act/private industry council system; adult education cooperatives; and apprenticeship programs. Representatives from private colleges and universities, private providers of vocational-technical education programs, the Texas Employment Commission, the Texas Innovation Information Network System, and other interested public sector entities may be included as voting members at the discretion of the committee.

(2) Voting members from the business and industry sectors shall comprise the remaining 50 percent of the committee. These members shall include participants from the region who represent: large and small employers; business and trade associations; labor organizations; and economic development organizations.

(3) Voting members shall reflect the population characteristics of the region with regard to race/ethnicity and gender.

(4) Voting members shall reflect the geographic diversity of the region, including urban, suburban, and rural areas.

(5) The committee may include, as voting members of the 50 percent education and public sectors, representatives of educational institutions and public sector entities which have education and training responsibilities that cross regional boundaries.

(k) **Committee bylaws.** Each quality work force planning committee shall establish bylaws that address: rules of procedure; committee size; subcommittee functions; conducting committee business; meeting times; attendance requirements; election and terms of officers; voting rules; approving the service delivery plan and related amendments; and approving amendments to bylaws.

(l) **Executive/steering committee.** Each quality work force planning committee shall establish an executive steering committee comprised of committee officers and others as specified in committee bylaws. The executive steering committee shall meet as needed to guide policy development and provide direction for the committee and its subcommittees.

(m) **Tri-agency partnership.** The three agencies responsible for the statewide implementation of quality work force planning are: the Central Education Agency; the Texas Higher Education Coordinating Board; and the Texas Department of Commerce (as the administrative agency for the Job Training Partnership Act and for the State Job Training Coordinating Council).

(1) Each agency shall provide support and technical assistance to the statewide quality work force planning effort. In addition, each agency shall have a specific coordination role, with support from the other two agencies. Central Education Agency staff shall provide technical assistance in coordinating committee functions and operations. Texas Higher Education Coordinating Board staff shall provide technical assistance in developing program articulation agreements and 2+2+2 programs. Texas Department of Commerce staff shall provide technical assistance in establishing regional labor market information systems.

(2) The three agencies shall evaluate the statewide implementation of quality work force planning. The committees shall provide information for that purpose.

(3) A tri-agency management team comprised of staff from each of the three agencies shall coordinate the implementation of statewide quality work force planning activities.

(4) The chief executive of each agency shall appoint three individuals participating in quality work force planning activities to advise the tri-agency management team on the implementation process.

APPENDIX C

1992 KEY INDUSTRIES AND TARGETED OCCUPATIONS FOR TEXAS' 24 QUALITY WORK FORCE PLANNING REGIONS

1992 Key Industries and Targeted Occupations for Texas' 24 Quality Work Force Planning Regions

For the first time, Texas has systematically identified its key industries and targeted occupations using the targeted occupations planning methodology developed by the State Occupational Information Coordinating Committee. After extensive piloting of the planning methodology and training of the 24 Quality Work Force Planning Committees, the Committees submitted their lists of key industries and targeted occupations. These lists are current as of August 1992. In the future, these lists will be updated each year.

Quality Work Force Planning Committees used a systematic, automated, data-driven planning method to identify these key industries and targeted occupations. SOCRATES, the automated regional labor market information system, is the underpinning of this planning method. The regional wisdom provided by each Committee is a critical part of the process of data interpretation and validation.

Planning Method

Industrial Evaluation Model

To identify **key industries**, Committees use the Industrial Evaluation Model from SOCRATES. The model rank orders the industries in a region according to a set of nine weighted economic indicators that identify industries **with the greatest potential for job openings**. The model prioritizes the industries on the basis of historical measures as well as national and statewide employment projections. Committees exercise judgment by adjusting the weight factors assigned to nine economic indicators.

- Current level of employment
- Change in employment level
- Employment projections
- Current number of businesses
- Change in number of businesses
- Current industry job openings
- Aggregate hourly index
- Number of potential new hires
- National employment projections

Regional Wisdom

After the initial ranking, Committees may add or delete specific industries based upon information received from other reliable sources of empirical data. For example, a Committee's economic development task force may have identified a major new industry that plans to locate in the region and employ large numbers of local residents.

Staffing Patterns

Quality Work Force Planning Committees next use the Matrix Statistical System from SOCRATES to examine the occupational staffing patterns of each key industry, including percent distributions of each occupation. Committees then begin to target occupations within these key industries by using the Occupational Evaluation Model-Career Information Delivery System from SOCRATES to select quality occupations that meet selected criteria.

Targeted Occupations

Committees target occupations by examining each occupation's number of projected annual average job openings, specific vocational preparation training time, growth-to-replacement ratio, prevailing state average wage rate, or other appropriate labor market variables. The result is a list of targeted occupations within a region's key industries that have the greatest job opening potential and which offer quality employment opportunities.

Emerging Occupations

Committees may use additional, reliable sources of empirical data to identify new and emerging occupations that may not yet be identified in occupational staffing patterns. For example, each Committee has examined information provided by the Texas Innovation Network System, which uses industry experts to identify the occupational spin-offs associated with new technologies.

State Priority Occupations

Committees also use the state list of priority occupations adopted by the State Board of Education as an additional data source. With certain exceptions, occupations on the list have at least 500 projected average annual openings to the year 2000, positive occupational growth-to-replacement ratios, training times within a period of over three months through four years, and average prevailing wage rates of at least $6.44 per hour.

Trends

The following 24 lists of key industries and targeted occupations, as well as the state list of priority occupations, reveal the following trends.

- The average for the number of key industries in a region is 13; the range is 10-23.
- Seven key industries were identified by the majority of Committees.
  - Health Services (24 Committees)
  - Business Services (23 Committees)
  - Construction—Special Trade Contractors (21 Committees)
  - Motor Freight Transport and Warehousing (17 Committees)
  - Social Services (17 Committees)

- Engineering, Accounting, Research, Management (15 Committees)
- Wholesale Trade—Nondurable Goods (12 Committees)

■ The average for the number of targeted occupations per region is 33; the range is from 17 (Texoma Region) to 71 (Capital Region). On average, 52 percent of a region's targeted occupations also are state priority occupations.

■ Fifteen targeted occupations were identified by the majority of Committees. Thirteen of these 15 targeted occupations are also state priority occupations. Only Medical Lab Technologists and Heating/A.C. Mechanics are not state priority occupations.

- Registered Nurses (24 Committees)
- Licensed Practical Nurses (24 Committees)
- Electrical/Engineering Techs (20 Committees)
- Radiological Techs/Technols (19 Committees)
- Diesel Mechanics (18 Committees)
- All Other Secretaries (17 Committees)
- Truck Drivers, All (16 Committees)
- Correction Officers (15 Committees)
- Medical Lab Technologists (15 Committees)
- Auto Mechanics (14 Committes)
- Medical Secretaries (13 Committees)
- Computer Operators (12 Committees)
- Computer Programmer/Aides (12 Committees)
- Heating/A.C. Mechanics (12 Committees)
- Maintenance Repairers, General (12 Committees)

Key Industries and Targeted Occupations in the Panhandle Quality Work Force Planning Region #1

Key Regional Industries

SIC Code	Title
01	Agricultural Production—Crops
02	Agricultural Production—Livestock & Animal
07	Agricultural Services
55	Automotive Dealers, Gasoline Serv. Stations
73	Business Services
34	Fabricated Metal Products, except Machinery
20	Food and Kindred Products
80	Health Services
92	Justice, Public Order, and Safety
29	Petroleum Refining and related industries
83	Social Services

Regionally Targeted Occupations

OES Code	Title
72002	Agricultural Supervisors
55199	*All Other Secretaries*
85302	*Auto Mechanics*
92935	Chemical Equipment Operator
24505	Chemical Technicians
68038	*Child Care Workers*
63017	*Correction Officers*
22505	*Electric Engineering Techs*
71005	Farm Managers
74002	Farm Workers
55347	General Office Clerks
32505	*Licensed Practical Nurses*
89108	*Machinists*
63014	*Police Patrol Officers*
32502	*Registered Nurses*
89801	Slaughterer/Butchers
27310	*Social Workers*
97101	*Truck Driver, All*
NCA	Feedlot Operator

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the South Plains Quality Work Force Planning Region #2

Key Regional Industries

SIC Code/Title

01 Agricultural Production—Crops
02 Agricultural Production—Livestock & Animal
07 Agricultural Services
73 Business Services
48 Communications
17 Construction—Special Trade Contractors
82 Educational Services
49 Electric, Gas, and Sanitary Services
36 Electronic and other Electrical Equipment
87 Engineering, Accounting, Research, Manage.
34 Fabricated Metal Products, except Machinery
80 Health Services
35 Indust. Commer. Machinery, Computer Equip
81 Legal Services
38 Measuring, Analyzing, & Controlling Instru.
39 Miscellaneous Manufacturing Industries
42 Motor Freight Transportation & Warehousing
13 Oil and Gas Extraction
27 Printing, Publishing, and Allied Industries
83 Social Services
32 Stone, Clay, Glass, and Concrete products
22 Textile Mill Products

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
55338 Bookkeeping Clerks
87110 Carpenters
24505 Chemical Technicians
68038 Child Care Workers
56011 Computer Operators
63017 Correction Officers
22505 Electric Engineering Techs
55347 General Office Clerks
32505 Licensed Practical Nurses
85132 Main Repairers, General
66005 Medical Assistants
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
66021 Occupational Therapy Assts
28305 Paralegal Personnel
66017 Physical Therapy Assistant
87502 Plumbers/Pipefitters
63014 Police Patrol Officers
66014 Psychiatric Aides
32916 Radiological Techs/Technols
55305 Receptionist
32502 Registered Nurses
32302 Respiratory Therapist
27302 Social Workers, Med./Psych.
51002 Supervisor/Mngr, Clerical
53904 Teacher Aides/Assistants
92702 Textile Machine Setter
97101 Truck Driver, All
68034 Welfare Service Aides
55311 Word Processing Typist
NCA Agriculture Technician
NCA Alternative Fuel Specialist
NCA Computer Manufacturing Tech
NCA Educational Assistants
NCA Elder Care Technician
NCA Environmental Engr. Tech
NCA Hazardous Waste/Material Managmt Tech
NCA Horticulture Management Technician
NCA Laboratory Analyst/Environment
NCA Livestock Management Technician
NCA Manufacturing/Automated Systems Tech
NCA Regulatory Compliance/Training Specialist
NCA Supervisor, Tree/Nut/Fruit/Farm

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the North Texas Quality Work Force Planning Region #3

Key Regional Industries

SIC Code/Title

07 Agricultural Services
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
82 Educational Services
87 Engineering, Accounting, Research, Manage.
54 Food Stores
80 Health Services
92 Justice, Public Order, and Safety
42 Motor Freight Transport and Warehousing
83 Social Services
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

72002 Agricultural Supervisors
19999 All Other Managers
55199 All Other Secretaries
31399 All Other Teachers
55338 Bookkeeping Clerks
68038 Child Care Workers
22502 Civil Engineering Techs
63017 Correction Officers
21902 Cost Estimators
85311 Diesel Mechanics
58005 Dispatchers, All Other
22514 Drafters
97117 Driver/Sales Workers
15005 Education Administrators
22505 Electric Engineering Techs
22126 Electrical Engineer
87202 Electricians
31305 Elementary Teachers
21508 Employment Interviewer
71005 Farm Managers
15026 Food Service Managers
55347 General Office Clerks
15008 Health Services Managers
98319 Helpers—Other Constr Trade
32505 Licensed Practical Nurses
19005 Managers, General Function
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
58026 Order Fillers, Sales
81099 Other Firstline Supervisor
98799 Other Freight/Stock Movers
32999 Other Health Professions
98999 Other Helpers/Laborers
69999 Other Service Workers
28305 Paralegal Personnel
66014 Psychiatric Aides
32916 Radiological Techs/Technols
27311 Recreation Workers
32502 Registered Nurses
49008 Sales Repres., Wholesale
41002 Sales Supervisors
49011 Salespersons, Retail
31308 Secondary Teachers
27310 Social Workers
31311 Special Education Teachers
58023 Stock Clerks, Stockroom
31521 Teacher Aides
68034 Welfare Service Aides

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the North Central Texas Quality Work Force Planning Region #4

Key Regional Industries

SIC Code/Title

55 Automotive Dealers, Gasoline Serv. Stations
73 Business Services
58 Eating and Drinking Places
82 Educational Services
36 Electronic and other Electrical Equipment
54 Food Stores
53 General Merchandise Stores
80 Health Services
72 Personal Services
93 Public Finance, Taxation, Monetary Policy
45 Transportation by Air
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

21114 Accountants/Auditors
53123 Adjustment Clerks
85323 Aircraft Mechanics
19999 All Other Managers
55199 All Other Secretaries
85302 Auto Mechanics
53508 Bill and Account Collector
56011 Computer Operators
25104 Computer Programmer/Aide
65026 Cooks, Restaurant
63017 Correction Officers
85705 Data Process Equip Repair
66002 Dental Assistants
32908 Dental Hygienist
85311 Diesel Mechanics
22505 Electric Engineering Techs
22126 Electrical Engineer
31305 Elementary Teachers
21508 Employment Interviewer
15026 Food Service Managers
85902 Heating/A.C. Mechanic
22128 Industrial Engineer
32505 Licensed Practical Nurses
85132 Main Repairers, General
19005 Managers, General Function
13011 Marketing Managers
66005 Medical Assistants
32905 Medical Lab Technician
55105 Medical Secretaries
66008 Nursing Aides/Orderlies
28305 Paralegal Personnel
21511 Personnel Specialist
32517 Pharmacists
63014 Police Patrol Officers
31302 Preschool Teachers
32916 Radiological Techs/Technols
32502 Registered Nurses
31308 Secondary Teachers
25102 Systems Analyst, EDP
97101 Truck Driver, All

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Northeast Texas Quality Work Force Planning Region #5

Key Regional Industries

SIC Code/Title

07 Agricultural Services
75 Automotive Repair, Services, and Parking
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
54 Food Stores
80 Health Services
16 Heavy Construct. other than Building Const.
42 Motor Freight Transport and Warehousing
72 Personal Services
83 Social Services
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

19999 All Other Managers
55199 All Other Secretaries
87110 Carpenters
49023 Cashiers
65026 Cooks, Restaurant
85311 Diesel Mechanics
65038 Food Preparation Workers
15026 Food Service Managers
55347 General Office Clerks
32505 Licensed Practical Nurses
85132 Main Repairers, General
66008 Nursing Aides/Orderlies
49999 Other Sales Workers
32502 Registered Nurses
49011 Salespersons, Retail
27310 Social Workers
49021 Stock Clerks, Sales Floor
81005 Supervisor, Constr. Trades
97101 Truck Driver, All
NCA Information Technology Support Specialist

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the East Texas Quality Work Force Planning Region #6

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, and Parking
73 Business Services
17 Construction—Special Trade Contractors
36 Electronic and other Electrical Equipment
80 Health Services
35 Indust. Commer. Machinry, Computer Equip
38 Measuring, Analyzing, & Controlling Instru.
76 Miscellaneous Repair Services
42 Motor Freight Transport and Warehousing
30 Rubber and Miscellaneous Plastic Products
83 Social Services
32 Stone, Clay, Glass, and Concrete products

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
85302 Auto Mechanics
68038 Child Care Workers
63017 Correction Officers
68010 Hairstylist/Cosmetologist
15008 Health Services Managers
55102 Legal Secretaries
32505 Licensed Practical Nurses
85132 Main Repairers, General
32902 Medical Lab Technologist
32911 Medical Records Technician
55105 Medical Secretaries
66017 Physical Therapy Assistant
32916 Radiological Techs/Technols
32502 Registered Nurses
97101 Truck Driver, All
NCA Electronics Technicians, All
NCA PC/Local Area Network Manager/Operator
NCA Plastics Technician

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the West Central Texas Quality Work Force Planning Region #7

Key Regional Industries

SIC Code/Title

55 Automotive Dealers, Gasoline Serv. Stations
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
49 Electric, Gas, and Sanitary Services
87 Engineering, Accounting, Research, Manage
34 Fabricated Metal Products, except Machinery
80 Health Services
92 Justice, Public Order, and Safety
42 Motor Freight Transport and Warehousing
83 Social Services
50 Wholesale Trade—Durable Goods

Regionally Targeted Occupations

OES Code/Title

24502 Agricultural Technicians
85305 Auto Body Repairers
85302 Auto Mechanics
24505 Chemical Technicians
56011 Computer Operators
25104 Computer Programmer/Aide
63017 Correction Officers
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
85717 Electronic Repair, Industrial
32508 Emergency Medical Techs
15026 Food Service Managers
85902 Heating/A.C. Mechanic
22508 Industrial Engineering Tech
32505 Licensed Practical Nurses
89108 Machinists
85132 Main Repairers, General
66005 Medical Assistants
32905 Medical Lab Technician
55105 Medical Secretaries
32502 Registered Nurses
85702 Telephone/Cable Installer
97101 Truck Driver, All

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Upper Rio Grande Quality Work Force Planning Region #8

Key Regional Industries

SIC Code/Title

872 Accounting, Auditing, & Bookkeeping Serv
010 Agricultural Production—Crops
020 Agricultural Production—Livestock & Animal
472 Arrangement of Passenger Transportation
737 Computer Programg, Data Processg, & other
531 Department Stores
581 Eating and Drinking Places
820 Education Services
367 Electronic Components and Accessories
514 Groceries and related products
541 Grocery Stores
808 Home Health Care Services
806 Hospitals
721 Laundry, Cleaning, and Garment Services
508 Machinery, Equipment, and Supplies
478 Misc. Services Incidental to Transportation
809 Miscellaneous Health Care Services
308 Miscellaneous Plastic Products
551 Motor Vehicle Dealers, (New and Used)
736 Personnel Supply Services
171 Plumbing, Heating, and Air-Conditioning
422 Public Warehousing and Storage
421 Trucking and Courier Services, except Air

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
85302 Auto Mechanics
55344 Billing Clerks
55338 Bookkeeping Clerks
49023 Cashiers
68038 Child Care Workers
25104 Computer Programmer/Aide
65028 Cooks, Institution
65026 Cooks, Restaurant
49017 Counter & Rental Clerks
65017 Counter Attendants

Regional Targeted Occupations *continued*

OES Code/Title

85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
93905 Electronic Assembler, Bench
93114 Electronic Equipment Assembler
91311 Extruding Machine Operator
71005 Farm Managers
74002 Farm Workers
15026 Food Service Managers
79014 Gardeners/Groundskeepers
55347 General Office Clerks
85902 Heating/A.C. Mechanic
97947 Industrial Truck Operator
32505 Licensed Practical Nurses
91321 Machine Forming Operator
19005 Managers, General Function
32902 Medical Lab Technologist
32905 Medical Lab Technician
66008 Nursing Aides/Orderlies
97989 Other Trans Equipment Oper
91905 Plastic Molding Mach Oper.
87502 Plumbers/Pipefitters
32916 Radiological Techs/Technols
15011 Real Estate Managers
55305 Receptionist
32502 Registered Nurses
49008 Sales Repres., Wholesale
41002 Sales Supervisors
49014 Salespersons, Parts
49011 Salespersons, Retail
58028 Shipping/Receiving Clerk
27310 Social Workers
49021 Stock Clerks, Sales Floor
58023 Stock Clerks, Stockroom
51002 Supervisor/Mngr, Clerical
81002 Supervisors, Mechanics
81008 Supervisors, Production Wkr
25102 Systems Analyst, EDP
31521 Teacher Aides
97101 Truck Driver, All
55307 Typists

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Permian Basin Quality Work Force Planning Region #9

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, and Parking
73 Business Services
17 Construction—Special Trade Contractors
82 Educational Services
87 Engineering, Accounting, Research, Manage.
54 Food Stores
80 Health Services
35 Indus. Commer. Machinry, Computer Equip.
42 Motor Freight Transport and Warehousing
13 Oil and Gas Extraction
83 Social Services
50 Wholesale Trade—Durable Goods

Regionally Targeted Occupations

OES Code/Title

85323 Aircraft Mechanics
87110 Carpenters
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
87202 Electricians
31305 Elementary Teachers
32505 Licensed Practical Nurses
89108 Machinists
66005 Medical Assistants
55105 Medical Secretaries
87502 Plumbers/Pipefitters
32916 Radiological Techs/Technols
55305 Receptionist
32502 Registered Nurses
27310 Social Workers
81005 Supervisor, Constr. Trades
51002 Supervisor/Mngr, Clerical
97101 Truck Driver, All
93914 Welders and Cutters
NCA CAD Technician
NCA CAM/CIM Technician
NCA Network Systems Technician
NCA Computer Maintenance Technician

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Concho Valley Quality Work Force Planning Region #10

Key Regional Industries

SIC Code/Title

73 Business Services
28 Chemicals and Allied Products
48 Communications
17 Construction—Special Trade Contractors
82 Educational Services
87 Engineering, Accounting, Research, Manage.
80 Health Services
92 Justice, Public Order, and Safety
81 Legal Services
83 Social Services
37 Transportation Equipment
50 Wholesale Trade—Durable Goods

Regionally Targeted Occupations

OES Code/Title

21114 Accountants/Auditors
43023 Advertising Sales Agents
56011 Computer Operators
25104 Computer Programmer/Aide
63017 Correction Officers
22505 Electric Engineering Techs
31305 Elementary Teachers
15008 Health Services Managers
55102 Legal Secretaries
32505 Licensed Practical Nurses
66005 Medical Assistants
32902 Medical Lab Technologist
55105 Medical Secretaries
32305 Occupational Therapist
28305 Paralegal Personnel
32308 Physical Therapist
32511 Physicians Assistants
63014 Police Patrol Officers
31302 Preschool Teachers
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
49005 Sales Repres., Scientific
49008 Sales Repres., Wholesale
31308 Secondary Teachers
27310 Social Workers
31311 Special Education Teachers
25102 Systems Analyst, EDP
53904 Teacher Aides/Assistants
31514 Vocational Education Counselors
31314 Vocational Education Teachers

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Heart of Texas Quality Work Force Planning Region #11

Key Regional Industries

SIC Code/Title

73 Business Services
87 Engineering, Accounting, Research, Manage.
20 Food and Kindred Products
80 Health Services
63 Insurance Carriers
42 Motor Freight Transport and Warehousing
27 Printing, Publishing, and Allied Industries
37 Transportation Equipment
50 Wholesale Trade—Durable Goods
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

93102 Aircraft Assemblers
85323 Aircraft Mechanics
55199 All Other Secretaries
93956 Assembler Fabricator
56011 Computer Operators
25104 Computer Programmer/Aide
21902 Cost Estimators
85311 Diesel Mechanics
22505 Electric Engineering Techs
85902 Heating/A.C. Mechanic
32505 Licensed Practical Nurses
85132 Main Repairers, General
32902 Medical Lab Technologist
92519 Other Printing Press Oper
66017 Physical Therapy Assistant
66014 Psychiatric Aides
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
NCA Hazardous Materials Technician
NCA Mental Health Specialist

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Capital Quality Work Force Planning Region #12

Key Regional Industries

SIC Code/Title

95 Admin Environmntl Quality & Housing Prog
07 Agricultural Services
75 Automotive Repair, Services, & Parking
48 Communications
17 Construction—Special Trade Contractors
82 Educational Services
36 Electronic and other Electrical Equipment
87 Engineering, Accounting, Research, Manage.
80 Health Services
70 Hotels, Rooming Houses, Camps, Lodging
92 Justice, Public Order, and Safety
81 Legal Services
59 Miscellaneous Retail
27 Printing, Publishing, and Allied Industries
83 Social Services
50 Wholesale Trade—Durable Goods
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

19999 All Other Managers
31399 All Other Teachers
85302 Auto Mechanics
43017 Business Services Agents
65028 Cooks, Institution
65026 Cooks, Restaurant
63017 Correction Officers
55335 Customer Service Representatives
66002 Dental Assistants
32908 Dental Hygienist
85311 Diesel Mechanics
92902 Elec Semiconductor Processor
93905 Electronic Assembler, Bench
93114 Electronic Equipment Assembler
31305 Elementary Teachers
32508 Emergency Medical Techs
15026 Food Service Managers
85902 Heating/A.C. Mechanic
66011 Home Health Aides
55102 Legal Secretaries
32505 Licensed Practical Nurses
66005 Medical Assistants

Regional Targeted Occupations *continued*

OES Code/Title

32905 Medical Lab Technician
32911 Medical Records Technician
55105 Medical Secretaries
66008 Nursing Aides/Orderlies
31114 Nursing Instructor
55323 Order Clerks
63099 Other Protective Service Wkr
28305 Paralegal Personnel
66026 Pharmacy Assistant
32308 Physical Therapist
32511 Physicians Assistants
87502 Plumbers/Pipefitters
31302 Preschool Teachers
13008 Purchasing Manager
32502 Registered Nurses
53805 Reservation Agents
32302 Respiratory Therapist
49008 Sales Repres., Wholesale
27308 Social Service Technician
27310 Social Workers
31311 Special Education Teachers
25102 Systems Analyst, EDP
53904 Teacher Aides/Assistants
85702 Telephone/Cable Installer
97101 Truck Driver, All
31514 Vocational Education Counselors
31314 Vocational Education Teachers
68034 Welfare Service Aides
55311 Word Processing Typist
NCA Alternative Fuel Specialist
NCA Asbestos Contractor Supervisor
NCA Bio-Medical Equipment Technician
NCA CAD Technician
NCA Chemical Dependency Specialist
NCA Consumer Information Specialist
NCA Crop Protection/Production Specialist
NCA Diagnostic Imaging Tech.
NCA Fiber Optics/Telecommunications Tech
NCA Hazardous Materials Technician
NCA Hazardous Waste/Material Manage. Tech
NCA Information Technology Support Specialist
NCA Instrument Elect Spec
NCA Laboratory Analyst/Environment
NCA Medical Coding Specialist
NCA Network System Technician
NCA Office Automation Tech.
NCA Regulatory Compliance/Training Specialist
NCA Safety/Sanitation Technician
NCA Technical Sales Representative
NCA Telecommunications Technician
NCA Waste Recycling Specialist

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Brazos Valley Quality Work Force Planning Region #13

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, Parking
55 Automotive Dealers, Gasoline Serv. Stations
73 Business Services
17 Construction—Special Trade Contractors
49 Electric, Gas, and Sanitary Services
87 Engineering, Accounting, Research, Manage.
34 Fabricated Metal Products, except Machinery
80 Health Services
42 Motor Freight Transport and Warehousing
27 Printing, Publishing, and Allied Industries
65 Real Estate
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

53123 Adjustment Clerks
19999 All Other Managers
55199 All Other Secretaries
85305 Auto Body Repairers
85302 Auto Mechanics
56011 Computer Operators
25104 Computer Programmer/Aide
55335 Customer Service Representatives
22514 Drafters
97117 Driver/Sales Workers
22505 Electric Engineering Techs
55347 General Office Clerks
98313 Helpers-Electricians
32505 Licensed Practical Nurses
66005 Medical Assistants
32902 Medical Lab Technologist
55105 Medical Secretaries
81099 Other Firstline Supervisor
66017 Physical Therapy Assistant
93956 Production Assembler/Fabr.
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
81008 Supervisors, Production Wkr

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas

Key Industries and Targeted Occupations in the Deep East Quality Work Force Planning Region #14

Key Regional Industries

SIC Code/Title

15 Building Construction—General Contractors
73 Business Services
17 Construction—Special Trade Contractors
34 Fabricated Metal Products, except Machinery
20 Food and Kindred Products
80 Health Services
35 Indust. Commer. Machinry, Computer Equip
24 Lumber & Wood products, except Furniture
59 Miscellaneous Retail
42 Motor Freight Transport and Warehousing
26 Paper and Allied Products
83 Social Services

Regionally Targeted Occupations

OES Code/Title

19999 All Other Managers
25104 Computer Programmer/Aide
85311 Diesel Mechanics
22505 Electric Engineering Techs
85902 Heating/A.C. Mechanic
98312 Helpers-Carpenters
32505 Licensed Practical Nurses
93938 Meat/Poultry Cutter, Hand
66005 Medical Assistants
32905 Medical Lab Technician
32902 Medical Lab Technologist
55105 Medical Secretaries
32999 Other Health Professions
32511 Physicians Assistants
87502 Plumbers/Pipefitters
31302 Preschool Teachers
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
49008 Sales Repres., Wholesale
27310 Social Workers
87814 Structural Metal Workers
25102 Systems Analyst, EDP
85702 Telephone/Cable Installer
93914 Welders and Cutters

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Southeast Quality Work Force Planning Region #15

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, and Parking
15 Building Construction—General Contractors
73 Business Services
28 Chemicals and Allied Products
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
82 Educational Services
87 Engineering, Accounting, Research, Manage.
80 Health Services
92 Justice, Public Order, and Safety
42 Motor Freight Transport and Warehousing
37 Transportation Equipment

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
22302 Architects
85305 Auto Body Repairers
85302 Auto Mechanics
89135 Boilermakers
87110 Carpenters
22114 Chemical Engineer
92935 Chemical Equipment Operator
24505 Chemical Technicians
22121 Civil Engineer
56011 Computer Operators
25104 Computer Programmer/Aide
65028 Cooks, Institution
63017 Correction Officers
56017 Data Entry Keyers
85311 Diesel Mechanics
22514 Drafters
22126 Electrical Engineer
31305 Elementary Teachers
15026 Food Service Managers
32505 Licensed Practical Nurses
89108 Machinists
22135 Mechanical Engineer
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
87502 Plumbers/Pipefitters
32916 Radiological Techs/Technols
32502 Registered Nurses
31308 Secondary Teachers
63047 Security Guards
89121 Shipfitters
31311 Special Education Teachers
87814 Structural Metal Workers
25102 Systems Analyst, EDP
97101 Truck Driver, All
93914 Welders and Cutters

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Gulf Coast Quality Work Force Planning Region #16

Key Regional Industries

SIC Code/Title

07 Agricultural Services
75 Automotive Repair, Services, and Parking
73 Business Services
17 Construction—Special Trade Contractors
82 Educational Services
87 Engineering, Accounting, Research, Manage.
80 Health Services
16 Heavy Construct. other than Building Const.
92 Justice, Public Order, and Safety
42 Motor Freight Transport and Warehousing
83 Social Services
50 Wholesale Trade—Durable Goods

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
85302 Auto Mechanics
22502 Civil Engineering Techs
25104 Computer Programmer/Aide
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
63008 Fire Fighter
32505 Licensed Practical Nurses
32902 Medical Lab Technologist
87508 Pipelayers
63014 Police Patrol Officers
32916 Radiological Techs/Technols
32502 Registered Nurses
25102 Systems Analyst, EDP
97101 Truck Driver, All
93914 Welders and Cutters
55311 Word Processing Typist
NCA Diagnostic Imaging Tech
NCA Instrument Elect Spec
NCA Network Systems Technician

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Golden Crescent Quality Work Force Planning Region #17

Key Regional Industries

SIC Code/Title

55 Automotive Dealers, Gasoline Serv. Stations
75 Automotive Repair, Services, Parking
73 Business Services
28 Chemicals and Allied Products
17 Construction—Special Trade Contractors
87 Engineering, Accounting, Research, Manage.
34 Fabricated Metal Products, except Machinery
80 Health Services
92 Justice, Public Order, and Safety
81 Legal Services
42 Motor Freight Transport and Warehousing
30 Rubber and Miscellaneous Plastic Products
83 Social Services
50 Wholesale Trade—Durable Goods
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

85305 Auto Body Repairers
85302 Auto Mechanics
24505 Chemical Technicians
25104 Computer Programmer/Aide
63017 Correction Officers
85311 Diesel Mechanics
22505 Electric Engineering Techs
87202 Electricians
32508 Emergency Medical Techs
85902 Heating/A.C. Mechanic
66011 Home Health Aides
55102 Legal Secretaries
32505 Licensed Practical Nurses
85132 Main Repairers, General
32902 Medical Lab Technologist
55105 Medical Secretaries
28305 Paralegal Personnel
87502 Plumbers/Pipefitters
85905 Precision Instrument Repair
32916 Radiological Techs/Technols
32502 Registered Nurses
93914 Welders and Cutters
55311 Word Processing Typist
NCA CAD/CAM/CIM Tech.
NCA Diagnostic Imaging Tech.
NCA Environmental Tech.
NCA Office Automation Tech.

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Alamo Quality Work Force Planning Region #18

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, Parking
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
82 Educational Services
87 Engineering, Accounting, Research, Manage.
54 Food Stores
80 Health Services
70 Hotels, Rooming Houses, Camps, Lodging
42 Motor Freight Transport and Warehousing
72 Personal Services
83 Social Services

Regionally Targeted Occupations

OES Code/Title

85326 Aircraft Engine Specialist
85323 Aircraft Mechanics
19999 All Other Managers
55199 All Other Secretaries
31399 All Other Teachers
85305 Auto Body Repairers
55338 Bookkeeping Clerks
87110 Carpenters
68038 Child Care Workers
21911 Compliance Officers
56011 Computer Operators
63017 Correction Officers
56017 Data Entry Keyers
66002 Dental Assistants
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
87202 Electricians

Regionally Targeted Occupations *continued*

OES Code/Title

85908 Electromedical Equipment Repair
93114 Electronic Equipment Assembler
85717 Electronic Repair, Industrial
85708 Electronic Repairer, Home
31305 Elementary Teachers
55321 File Clerks
15026 Food Service Managers
55347 General Office Clerks
98319 Helpers-Other Constr Trade
66011 Home Health Aides
53808 Hotel Desk Clerks
97947 Industrial Truck Operator
32505 Licensed Practical Nurses
85132 Main Repairers, General
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
32999 Other Health Professions
68035 Personal Home Care Aide
87502 Plumbers/Pipefitters
63014 Police Patrol Officers
66014 Psychiatric Aides
32916 Radiological Techs/Technols
55305 Receptionist
32502 Registered Nurses
41002 Sales Supervisors
63047 Security Guards
89132 Sheet Metal Workers
63031 Sheriffs/Deputy Sheriffs
27310 Social Workers
31311 Special Education Teachers
25102 Systems Analyst, EDP
31521 Teacher Aides
97101 Truck Driver, All
95002 Water/Wastewater Treatment
55311 Word Processing Typist
NCA Air Quality Control Technician
NCA Database Specialists
NCA Environmental Technician
NCA Hazardous Materials Technician
NCA Industrial Safety Technician
NCA Intergenerational Care Giver
NCA Office Automation Specialists
NCA Solid Waste Technician
NCA Urban Horticulturist
NCA Waterworks Operator

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the South Texas Quality Work Force Planning Region #19

Key Regional Industries

SIC Code/Title

56 Apparel and Accessory Stores
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
53 General Merchandise Stores
80 Health Services
59 Miscellaneous Retail
42 Motor Freight Transport and Warehousing
47 Transportation Services
50 Wholesale Trade—Durable Goods
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

55199 All Other Secretaries
55338 Bookkeeping Clerks
56011 Computer Operators
65026 Cooks, Restaurant
56017 Data Entry Keyers
85311 Diesel Mechanics
22505 Electric Engineering Techs
87202 Electricians
55347 General Office Clerks
85902 Heating/A.C. Mechanic
32505 Licensed Practical Nurses
85132 Main Repairers, General
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
85926 Office Machine Servicer
32916 Radiological Techs/Technols
32502 Registered Nurses
58028 Shipping/Receiving Clerk
25102 Systems Analyst, EDP
97101 Truck Driver, All
NCA Traffic Clerk, Import Export

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Coastal Bend Quality Work Force Planning Region #20

Key Regional Industries

SIC Code	Title
15	Building Construction—General Contractors
73	Business Services
17	Construction—Special Trade Contractors
87	Engineering, Accounting, Research, Manage.
80	Health Services
16	Heavy Construct. other than Building Const.
81	Legal Services
59	Miscellaneous Retail
42	Motor Freight Transport and Warehousing
65	Real Estate
83	Social Services
50	Wholesale Trade—Durable Goods
51	Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code	Title
21114	Accountants/Auditors
55199	*All Other Secretaries*
85305	Auto Body Repairers
85302	*Auto Mechanics*
97108	Bus Driver
87110	*Carpenters*
56011	*Computer Operators*
25104	*Computer Programmer/Aide*
63017	*Correction Officers*
21902	Cost Estimators
85705	Data Process Equip Repair
32908	Dental Hygienist
85311	*Diesel Mechanics*
22514	*Drafters*
87108	Drywall Installers
22505	*Electric Engineering Techs*
87202	*Electricians*
85902	Heating/A.C. Mechanic
85314	Heavy Equipment Mechanics
66011	Home Health Aides
55102	*Legal Secretaries*
32505	*Licensed Practical Nurses*
85132	*Main Repairers, General*
19005	Managers, General Function
32905	Medical Lab Technician
55105	*Medical Secretaries*
32305	Occupational Therapist
32308	Physical Therapist
87502	*Plumbers/Pipefitters*
31302	*Preschool Teachers*
66014	Psychiatric Aides
32916	*Radiological Techs/Technols*
53914	Real Estate Clerks
55305	*Receptionist*
32502	*Registered Nurses*
34011	Reporters/Correspondents
32302	Respiratory Therapist
49011	Salespersons, Retail
58028	Shipping/Receiving Clerk
27310	*Social Workers*
81005	*Supervisor, Constr. Trades*
51002	*Supervisor/Mngr, Clerical*
32928	Surgical Technicians
25102	*Systems Analyst, EDP*
53904	Teacher Aides/Assistants
85702	Telephone/Cable Installer
97101	*Truck Driver, All*
93914	*Welders and Cutters*
55311	*Word Processing Typist*

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

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Key Industries and Targeted Occupations in the Lower Rio Grande Valley Quality Work Force Planning Region #21

Key Regional Industries

SIC Code/Title

75 Automotive Repair, Services, and Parking
73 Business Services
28 Chemicals and Allied Products
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
82 Educational Services
87 Engineering, Accounting, Research, Manage.
80 Health Services
92 Justice, Public Order, and Safety
39 Miscellaneous Manufacturing Industries
30 Rubber and Miscellaneous Plastic Products
83 Social Services

Regionally Targeted Occupations

OES Code/Title

21114 Accountants/Auditors
19999 All Other Managers
55199 All Other Secretaries
85305 Auto Body Repairers
85302 Auto Mechanics
55338 Bookkeeping Clerks
87110 Carpenters
22114 Chemical Engineer
24505 Chemical Technicians
68038 Child Care Workers
22121 Civil Engineer
65026 Cooks, Restaurant
63017 Correction Officers
32908 Dental Hygienist
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
22126 Electrical Engineer
87202 Electricians
31305 Elementary Teachers
32508 Emergency Medical Techs
55347 General Office Clerks
68005 Hairstylist/Cosmetologist
85902 Heating/A.C. Mechanic
55102 Legal Secretaries
32505 Licensed Practical Nurses
89108 Machinists
85132 Main Repairers, General
19005 Managers, General Function
22135 Mechanical Engineer
32905 Medical Lab Technician
55105 Medical Secretaries
66008 Nursing Aides/Orderlies
43099 Other Salespersons
27199 Other Social Scientists
28305 Paralegal Personnel
66017 Physical Therapy Assistant
91905 Plastic Molding Mach Oper.
87502 Plumbers/Pipefitters
63014 Police Patrol Officers
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
49011 Salespersons, Retail
49008 Sales Repres., Wholesale
31308 Secondary Teachers
89102 Tool And Die Maker
93914 Welders and Cutters

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Texoma Quality Work Force Planning Region #22

Key Regional Industries

SIC Code/Title

55 Automotive Dealers, Gasoline Serv. Stations
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
36 Electronic and other Electrical Equipment
34 Fabricated Metal Products, except Machinery
53 General Merchandise Stores
80 Health Services
63 Insurance Carriers
81 Legal Services
30 Rubber and Miscellaneous Plastic Products
50 Wholesale Trade—Durable Goods

Regionally Targeted Occupations

OES Code/Title

85305 Auto Body Repairers
85302 Auto Mechanics
56011 Computer Operators
65028 Cooks, Institution
85705 Data Process Equip Repair
85311 Diesel Mechanics
22514 Drafters
22505 Electric Engineering Techs
85708 Electronic Repairer, Home
32508 Emergency Medical Techs
85902 Heating/A.C. Mechanic
32505 Licensed Practical Nurses
89108 Machinists
32905 Medical Lab Technician
55105 Medical Secretaries
32502 Registered Nurses
32302 Respiratory Therapist

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Central Texas Quality Work Force Planning Region #23

Key Regional Industries

SIC Code/Title

07 Agricultural Services
55 Automotive Dealers, Gasoline Serv. Stations
73 Business Services
17 Construction—Special Trade Contractors
58 Eating and Drinking Places
25 Furniture and Fixtures
80 Health Services
70 Hotels, Rooming Houses, Camps, Lodging
35 Indus. Commer. Machinry, Computer Equip.
61 Nondepository Credit Institutions
33 Primary Metal Industries
27 Printing, Publishing, and Allied Industries
30 Rubber and Miscellaneous Plastic Products
83 Social Services
37 Transportation Equipment
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

72002 Agricultural Supervisors
85323 Aircraft Mechanics
55199 All Other Secretaries
85305 Auto Body Repairers
85302 Auto Mechanics
65028 Cooks, Institution
63017 Correction Officers
85311 Diesel Mechanics
97117 Driver/Sales Workers
22505 Electric Engineering Techs
15026 Food Service Managers
85902 Heating/A.C. Mechanic
32505 Licensed Practical Nurses
85132 Main Repairers, General
66005 Medical Assistants
32902 Medical Lab Technologist
55105 Medical Secretaries
87502 Plumbers/Pipefitters
31302 Preschool Teachers
92543 Printing Press Operators
32916 Radiological Techs/Technols
32502 Registered Nurses
32302 Respiratory Therapist
97101 Truck Driver, All
NCA Environmental Technician
NCA Network System Technician

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

Key Industries and Targeted Occupations in the Middle Rio Grande Quality Work Force Planning Region #24

Key Regional Industries

SIC Code/Title

07 Agricultural Services
73 Business Services
17 Construction—Special Trade Contractors
20 Food and Kindred Products
80 Health Services
16 Heavy Construct. other than Building Const.
70 Hotels, Rooming Houses, Camps, Lodging
92 Justice, Public Order, and Safety
59 Miscellaneous Retail
42 Motor Freight Transport and Warehousing
83 Social Services
51 Wholesale Trade—Nondurable Goods

Regionally Targeted Occupations

OES Code/Title

79011 Agricultural Grader/Sorter
72002 Agricultural Supervisors
55199 All Other Secretaries
55338 Bookkeeping Clerks
56011 Computer Operators
25104 Computer Programmer/Aide
65028 Cooks, Institution
65026 Cooks, Restaurant
63017 Correction Officers
22505 Electric Engineering Tech
15026 Food Service Managers
32505 Licensed Practical Nurses
32902 Medical Lab Technologist
66008 Nursing Aides/Orderlies
92974 Packaging Mach Operators
66017 Physical Therapy Assistant
31302 Preschool Teachers
32916 Radiological Techs/Technols
32502 Registered Nurses
49011 Salespersons, Retail
27310 Social Workers
53904 Teacher Aides/Assistants
97101 Truck Driver, All

Current August 31, 1992; updated annually.
SIC—Standard Industrial Code
OES—Occupational Employment Statistics
NCA—No Code Assigned

PLEASE NOTE: All entries are arranged alphabetically; no rank-ordering is implied.
Italicized entries are also on the 1992 List of Priority Occupations for the State of Texas.

1992 List of Priority Occupations for the State of Texas

OES* Code	OES Title
53123	*Adjustment Clerks*
19999	*All Other Managers*
55199	*All Other Secretaries*
31399	*All Other Teachers*
85302	*Auto Mechanics*
53508	*Bill and Account Collector*
55344	*Billing Clerks*
97111	*Bus Driver, School*
43017	*Business Services Agents*
56011	*Computer Operators*
25104	*Computer Programmer/Aide*
63017	*Correction Officers*
66002	*Dental Assistants*
85311	*Diesel Mechanics*
22514	*Drafters*
85723	*Elec Powerline Installer*
22505	*Electric Engineering Techs*
31305	*Elementary Teachers*
15026	*Food Service Managers*
79014	*Gardeners/Groundskeepers*
98312	*Helpers-Carpenters*
98313	*Helpers-Electricians*
98319	*Helpers-Other Constr Trade*
98315	*Helpers-Plumbers*
97947	*Industrial Truck Operator*
43002	*Insurance Sales Agents*
55102	*Legal Secretaries*
32505	*Licensed Practical Nurses*
89108	*Machinists*
85132	*Main Repairers, General*
21999	*Management Support Workers*
98102	*Mechanic Helpers*
66005	*Medical Assistants*
55105	*Medical Secretaries*
22599	*Other Engineering Techs*
81099	*Other Firstline Supervisor*
66099	*Other Health Service Workers*
63099	*Other Protective Service Wkr*
61099	*Other Service Supervisors*
87402	*Painter/Paperhanger,Cons*
13005	*Personnel Managers*
21511	*Personnel Specialist*
87502	*Plumbers/Pipefitters*
63014	*Police Patrol Officers*
31302	*Preschool Teachers*
58008	*Production Clerks*
32916	*Radiological Techs/Technols*
15011	*Real Estate Managers*
55305	*Receptionist*
32502	*Registered Nurses*
49008	*Sales Repres., Wholesale*
41002	*Sales Supervisors*
49014	*Salespersons, Parts*
27310	*Social Workers*
31311	*Special Education Teachers*
49021	*Stock Clerks, Sales Floor*
81005	*Supervisor, Constr. Trades*
51002	*Supervisor/Mngr, Clerical*
81002	*Supervisors, Mechanics*
81008	*Supervisors, Production Wkr*
25102	*Systems Analyst, EDP*
53102	*Tellers*
97101	*Truck Driver, All*
93914	*Welders and Cutters*
55311	*Word Processing Typist*

Additional, New, and Emerging Occupations

87110	*Carpenters*[1]
87202	*Electricians*[1]
68038	*Child care workers*[2]
NCA**	*Agriculture in the International Marketplace*[3]
NCA	*Aquaculturalists*[4]
NCA	*Computer network systems technicians*[4]
NCA	*Crop protection/production specialists*[4]
NCA	*Information technology support specialists*[4]
NCA	*Laser/electro-optics technicians*[4]
NCA	*Manufacturing/automated systems technicians*[4]
NCA	*Telecommunications specialists*[4]

*Occupational Employment Statistics

**No Code Assigned

[1]Training time exceeds four-year ceiling criterion.

[2]$5.08 per hour wage falls below $6.44 per hour criterion.

[3]First adopted by the State Board of Education on September 10, 1988.

[4]Identified by the Texas Innovation Network.

APPENDIX D

RESULTS FROM THE FIELD

Results from the Field

By forming partnerships to support career and technical education and training programs and by improving communication and dissemination of labor market information, Quality Work Force Planning Committees can impact programs. Illustrative examples of 1991-92 program-related outcomes from 12 Committees selected to represent different parts of the state (North, South, East, West, and Central Texas) are presented below. Most outcomes are reflected in new program start-ups or revisions of existing programs related to targeted occupations.

Alamo Region

In the Alamo region, several school districts reported that Committee information and activities had influenced program decisions.

- Comal ISD initiated a law enforcement course.
- Edgewood ISD revised courses in auto mechanics, graphic arts, and industrial cooperative technology.
- Floresville ISD initiated courses in marketing education and health occupations.
- Harlandale ISD initiated an electronics course and redirected a child care course.
- Hondo ISD began a multi-occupational cooperative training course.
- North East ISD initiated courses in electronics, principles of technology, and clinical rotation.
- Northside ISD initiated a child care course.
- San Antonio ISD initiated courses in career exploration and electronics. A child care course was redirected.
- Southwest ISD redirected a home economics course.

Two community colleges reported impacts.

- St. Phillips College initiated a new Nurse ADN program and revised 10 certificate programs in construction.
- San Antonio College initiated certificate programs in criminal justice, computer-aided drafting, medical assistant, mental health, and basic firefighter. The college redirected certificate programs for office systems technology and hazardous materials handling. A program in postal administration was deactivated.

The Texas Engineering Extension Service initiated programs in auto air conditioning and climate control and computer programming. It redirected a program in systems maintenance technology and deactivated programs in plumbing and production machinery. Service Jobs for Progress, a Job Training Partnership Act service delivery provider, initiated a program in IBM office technology.

Brazos Valley Region

The Brazos Valley Quality Work Force Planning Committee reported the following program-related impacts.

- Blinn College initiated new programs in criminal justice, manufacturing technology, early childhood development, and paralegal studies. The College revised its office technology and business occupations programs, and eliminated its real estate program.
- The Committee provided innovation grants to teachers in the College Station, Mumford, Bryan, and Navasota ISDs to conduct projects based on SCANS skills and competencies.

Capital Region

In the Capital region, program decisions were affected in numerous ways by the Committee.

- Texas Instruments will provide internships for Bastrop ISD and Georgetown ISD students.
- The Rural Capital Area Private Industry Council learning center curriculum was modified to incorporate SCANS skills.
- Austin Community College revised its Office Occupations curriculum.
- Southwest Texas State University, in its role as fiscal agent for a ten county adult education coop, has initiated a pilot Tech-Prep for adults project.
- The Committee, in cooperation with the University of Texas, is conducting a school-to-work transition project to include hands-on employment experiences for students and specific avenues for parental involvement.
- Southwest Texas State University, Austin Community College, San Marcos CISD, Gary Job Corps, and the local San Marcos telephone company are coordinating efforts to develop distance education programs.
- Austin ISD revised its curriculum for health occupations courses.
- Round Rock ISD and Austin Community College developed program articulation agreements in office occupations and electronics.
- Round Rock ISD developed articulation agreements with Central Texas College and Texas State Technical College at Waco in auto mechanics, agriculture, drafting, electronics, and marketing education.
- Del Valle ISD and San Marcos CISD initiated health occupations and office occupations courses. South Austin Medical Clinic will provide internships to Del Valle health occupations students.
- Bastrop ISD and San Marcos CISD initiated courses in electronics and principles of technology.
- Marble Falls ISD implemented a new child development curriculum.
- Georgetown and Round Rock ISDs are jointly developing a new computer-assisted drafting course.

Central Texas Region

The Central Texas Quality Work Force Planning Committee reported that regional program providers used Committee labor market information in decisionmaking.

- The Committee assisted the Temple Economic Development Commission in recruiting the McLane Company, a major wholesale warehouse business directly creating 500 new jobs. Using SOCRATES data, the Committee provided information showing the economic impact of the new firm upon the area economy. Over 1,400 new jobs in other businesses and $43,000,000 in new personnel income would be added.
- Temple Junior College initiated three health-care related programs: registered nurse, pharmacy technician, and medical transcription.
- Temple Junior College initiated a program in manufacturing technology.
- Temple Junior College initiated a Total Quality Management curriculum for Tech-Prep.
- Troy ISD and Temple ISD have initiated planning for a joint health occupations program.
- Temple Junior College deactivated fashion merchandising and fire technology programs.
- Temple Junior College initiated a single parent/displaced homemaker program.
- The Central Texas Private Industry Council initiated competency-based training for dropout prevention.
- Temple Junior College opened a dialogue with the Bluebonnet Chapter of the Southern Building Code Congress International regarding planning for a building construction technology program and continuing education in building code application.

Coastal Bend Region

In the Coastal Bend region, the Committee reported that eight school districts and colleges used labor market information to impact programs.

- Corpus Christi ISD initiated an educational assistant cooperative program.
- Gregory-Portland ISD started an introduction to transportation course and a manufacturing graphics course.
- Beeville ISD initiated a course in microcomputer applications.
- Calallen ISD initiated a business microcomputer applications course.
- Robstown ISD started a business office clerical course, a law enforcement course, and a health occupations course.
- Bee County College deactivated programs in fashion merchandising and banking. It closed business data processing, diesel mechanic, and nurse's aide programs.
- Del Mar College closed business administration and secretarial programs.

East Texas Region

In the East Texas region, the Committee fostered the development of program articulation agreements, contracted instruction, and industry training programs.

- Kilgore Junior College signed program articulation agreements in office administration with nine school districts, in child development with six school districts, in computer science with three school districts, in cosmetology with one school district, in fashion merchandising with three school districts, and in accounting with one school district.
- Panola College signed program articulation agreements in data processing with eight school districts.
- Trinity Valley Community College signed program articulation agreements in accounting, parent and child development, microcomputer applications, computer programming, and business management with eight school districts. The College signed articulation agreements in data processing, drafting, and textile and apparel design with seven school districts.
- Tyler Junior College signed program articulation agreements in accounting with 14 school districts, in office procedures with seven school districts, in computer programming with five school districts, in engineering design graphics with six school districts, in computer-aided architectural drafting with four school districts, and in electronics, child care, and agriculture education with one school district.
- The University of Texas at Tyler signed articulation agreements in child development, early childhood education, and criminal justice with Kilgore Junior College. The University signed an articulation agreement in industrial technology with Tyler Junior College.
- Kilgore Junior College provided contracted instruction in automotive technology, commercial art, cosmetology, drafting, machine technology, and printing for Kilgore, Sabine, and West Rusk school districts.
- Trinity Valley Community College provided contracted instruction in automotive technology, cosmetology, and welding for eight school districts.
- Tyler Junior College provided contracted instruction in air conditioning/refrigeration and welding for Chapel Hill, Tyler, Whitehouse, and Winoma school districts.
- Kilgore Junior College, Panola College, and Tyler Junior College conducted industry training for a total of 18 businesses in East Texas. Programs were offered in computer numerical control, machine technology, management, computer programming, electronics, drafting, and office occupations.
- The Committee assisted five small school districts to form a consortium to share $65,000 in federal vocational education funds.

North Central Texas Region

In North Central Texas, program-related decisions have reflected the work of Committee task forces and the distribution of labor market information.

- The Committee collaborated with Dallas County Community College District and Navarro College to determine the direct and indirect manpower needs resulting from construction of the Super Conducting Super Collider and to identify needed training programs.

- The Aircraft Maintenance Skills Task Force has involved employers and educators to develop an educational network for the aircraft career field to provide training for jobs ranging from technicians to executives. Task force input has led Tarrant County Junior College to double the size of its aircraft maintenance program and has led Mountain View College to initiate a new program in the field.

- The Management Task Force identified and validated management competencies required for entry-level managers, which were shared with educators and employers throughout the region. The Global Edge Tech-Prep Consortium, the Tarrant County Tech-Prep Consortium, Plano ISD, Lipan ISD, Collin County Community College, and the University of North Texas will develop and implement new curricula based on the identified competencies.

- The Health Services Task Force is working with the North Central Consortium for Tech-Prep Programs to implement a health services program partnership with DeSoto ISD, Duncanville ISD, Wilmer Hutchins ISD, and El Centro College.

- Cleburne ISD has developed six program articulation agreements with Hill College, five articulation agreements with Tarrant County Junior College, and two articulation agreements with Texas State Technical College at Waco.

- Waxahachie ISD initiated a new plant operation/maintenance course.

- Bridgeport ISD revised courses in automotive technology, landscaping, and horticulture.

- Texas Woman's University revised its nursing and allied health programs.

- Weatherford ISD revised curricula for its electronics and aviation repair courses.

Northeast Texas Region

School districts and colleges in North East Texas made use of Committee labor market information to initiate, revise, or deactivate several programs.

- Daingerfield ISD started new courses in principles of technology and energy systems.

- Hooks ISD initiated new courses in automotive technology, food technology, energy and environmental technology, and business information processing.

- Prairiland ISD initiated a new course in horticulture.

- Simms ISD began a new forestry course.

- Sulphur Springs ISD initiated new courses in industrial technology and computer applications.

- Atlanta ISD initiated a new parenting program.

- Talco-Bogata ISD initiated a new health occupations course.

- Northeast Texas Community College revised programs in agriculture, automotive technology, criminal justice, and nursing. It deactivated programs in industrial electric power, heating and air conditioning, and welding.

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- Paris Junior College revised programs in welding, office technology-legal option, and air conditioning and refrigeration.
- Texarkana College revised programs in banking/finance and real estate. It deactivated programs in agri-business management and printing.

Panhandle Region

The Panhandle Quality Work Force Planning Committee reported new program start-ups or revisions in nine school districts.

- Amarillo ISD initiated courses in health occupations and microcomputer applications, and also started a new utility engineering mentor program. The district revised programs in computer drafting and engineering, industrial technology, auto mechanics, building trades, and commercial/industrial foods.
- Borger ISD initiated a new health occupations course and revised its computerized drafting course.
- Canadian ISD, Dumas ISD, Hereford ISD, and Canyon ISD, started new courses in health occupations. Canyon ISD also initiated a new microcomputer applications course and revised its auto mechanics course.
- Lazbuddie ISD, Bovina ISD, and Farwell ISD, in cooperation with the Panhandle Private Industry Council, Panhandle Community Service, and Clovis Community College, started the Parmer County JETT program—an enrichment program for at-risk students.

South Texas Region

In South Texas, program-related results were reported in the form of articulation agreements, new programs, and program referrals.

- Laredo National Bank initiated an intern program with the Laredo State University Marketing Department.
- Laredo ISD and Laredo Junior College signed program articulation agreements in auto technology, building technology, welding, and office education.
- Laredo Junior College initiated planning for a new Health Careers Building.
- United ISD initiated a new allied health program.
- Region I Education Service Center began referring students to adult education courses in Starr County.
- Laredo Junior College initiated plans to train 1,000 data entry personnel for a newly located business in the region.
- Mercy Regional Medical Center expanded its nursing programs. Laredo Junior College revised its programs in computer information systems and allied health.
- Laredo State Center and Laredo Junior College established an agreement for nursing placement and educational services.

Upper Rio Grande Region

The Upper Rio Grande Quality Work Force Planning Committee reported that six school districts and one community college used Committee information to impact programs.

- El Paso ISD, Ysleta ISD, and Local #231 of the Plumbing and Pipefitters Union started a pre-apprenticeship program for the plumbing and pipefitting trades.
- El Paso ISD, Ysleta ISD, and Local #583 of the International Brotherhood of Electrical Workers started a pre-apprenticeship program for the electrical trades.
- El Paso ISD initiated new courses in computer applications, industrial technology, and medical secretary.
- Ysleta ISD initiated new courses in business computer applications, business computer programming, and microcomputer applications.
- Fabens ISD started new courses in business computer applications and business computer programming.
- Canutillo ISD initiated a medical transcription course and revised an agricultural mechanics course. It deactivated a business office CVAE course.
- Dell City ISD revised courses in agriculture business/marketing and agriculture structure and technology.
- Fort Hancock ISD began new courses in animal and plant production and diversified agriculture.
- El Paso Community College initiated a physical therapy program and revised programs in correctional science, information processing (certificate), office administration (certificate), and respiratory care technology.

West Central Texas Regions

The West Central Texas Quality Work Force Planning Committee has provided labor market information and technical assistance to impact a variety of programs and activities in the region.

- The Committee has provided targeted occupations information and technical assistance to Brownwood ISD for use in implementing its new "Choice" program.
- The Committee provided labor market information to the West Central Texas Economic Development District for use in preparing an economic development plan for the region under a grant from the U.S. Department of Commerce.
- The Committee provided information to the Abilene Industrial Foundation to measure the impact of locating another prison in the city.
- The Committee provided technical assistance to Brownwood ISD in developing health care 2+2 and 2+2+2 programs with Ranger Junior College, Howard College, and Howard Payne University.

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- The Committee provided technical assistance to Brownwood ISD in developing 2+2 auto mechanics programs with Cisco Junior College, Ranger Junior College, and Texas State Technical College—Sweetwater.

- The Committee arranged a meeting between the Rolling Plains Economic Development District, the City of Stamford, Stamford Independent School District, Cisco Junior College, Western Texas College, Texas State Technical College—Sweetwater, and the West Central Texas Rural Economic Development district to explore possibilities of expanding the career and technical education capabilities for Jones and Haskell counties. An immediate nsequence of this effort was an agreement between Western Texas College and Stamford Independent School District to expand the courses offered by Western Texas College's extension program in Stamford, using the physical facilities of the district. In addition, a task force was formed to study the feasibility of developing a permanent post-secondary career and technical extension site in Stamford. Western Texas College and Texas State Technical College—Sweetwater are cooperating with the Stamford group to determine possible course offerings and activities.

APPENDIX E

SIDE-BY-SIDE COMPARISON: QUALITY WORK FORCE PLANNING COMMITTEES AND TECH-PREP CONSORTIA

Side-By-Side Comparison: Quality Work Force Planning Committees and Tech-Prep Consortia

Responsibilities of Quality Work Force Planning Committees (QWFPCs)	Responsibilities of Tech-Prep Consortia	Coordination Between QWFPCs & Tech-Prep Consortia
1. Facilitate the development of an integrated delivery system for vocational-technical education and training so Texas can develop a skilled and educated work force. 2. Provide labor market information services within the region, which include: a. maintaining the regional labor market information system; b. identifying key industries and targeted occupations; and c. providing labor market information to the region's public independent school districts, education service centers, public institutions of higher education, private industry councils. Tech-Prep consortia, proprietary schools, economic development organizations, governmental units, and community-based organizations for use in program planning. 3. Maintain inventories of programs and services for use in program planning, which include: a. vocational-technical education programs; b. adult education and literacy programs; and c. economic development organizations and services. 4. Produce the following outcomes by implementing a regional service delivery plan based upon targeted occupations. a. Partnerships to support vocational-technical education and training programs, services, and activities, to include:	1. Develop and implement Tech-Prep High School and Associate Degree programs, based upon selected targeted occupations identified by the region's Quality Work Force Planning Committee. The programs include: a. a six-year program of study beginning in the ninth grade of high school and leading to an AAS degree with advanced skills from a public community or technical college; b. a cooperatively-developed (business, industry and labor, secondary and higher education), state guided competency-based technical education curriculum with a fully transferable core that is non-duplicative, and which effectively integrates academic and technical competencies; c. graduation plans or programs of study which specify a coherent sequence of technical and college preparatory and college-level general education courses which span secondary and higher education levels; d. student competency in critical thinking skills and application of mathematics, science, and communication skills, as well as integration of workplace-transferable technical and academic skills; e. student workplace basic skills, such as those identified by the SCANS reports; f. integrated workplace and classroom learning experiences which provide theoretical and applied instruction and practical experience in a business or industry connected with the area of study;	1. The Tech-Prep consortium may function as a subcommittee of the QWFPC. 2. The QWFPC and the Tech-Prep consortium may share reciprocal membership. 3. The QWFPC and the Tech-Prep consortium may conduct joint meetings and activities. 4. The QWFPC will deliver to the Tech-Prep consortium an annual report containing planning information on regional occupational demands with industrial employment distributions and forecasted job openings for the targeted occupations addressed by the Tech-Prep curriculum. 5. The QWFPC will deliver to the Tech-Prep consortium occupational duties and tasks lists for use as expected training outcomes to guide curriculum development by the consortium. 6. The QWFPC may assist the Tech-Prep consortium in identifying competency benchmarks for targeted occupations for use as reference criteria for the development of Tech-Prep program participant assessment tools. 7. Members of the Tech-Prep consortium will present their 6-year curriculum plans and student assessment instruments to the QWFPC for validation. 8. The Tech-Prep consortium will provide the QWFPC an annual report on Tech-Prep enrollments, completion rates, wages and retention rates.

Responsibilities of Quality Work Force Planning Committees (QWFPCs)	Responsibilities of Tech-Prep Consortia	Coordination Between QWFPCs & Tech-Prep Consortia
(1) development of program articulation agreements, such as 2+2+2 programs, and coordination with Tech-Prep High School and Associate Degree program initiatives with procedures to encourage student enrollment and completion; (2) development of resource sharing agreements among education and training providers, private industry councils, business, industry, and labor; and (3) coordination with dropout, adult education, and literacy programs. b. Improved communication and dissemination of information within the region among: (1) education and training providers and employers by sharing ideas to improve the quality of vocational-technical education and training programs; and (2) education and training providers and economic development organizations to meet the region's future employment training needs. c. Improvement of vocational-technical education and training programs, including apprenticeships—through processes of initiation, redirection, revision or deactivation—by public independent school districts, public institutions of higher education, and private industry councils in response to the leadership and technical assistance provided by the QWFPC in the region.	g. opportunities for advanced technical skills training and/or baccalaureate study; h. a coordinated delivery system for educational and social preparatory and support services for students, including special population students, to ensure access to program participation and student achievement; i. a comprehensive career development guidance counseling program for students beginning no later than the seventh grade and continuing participant assessment throughout the program; j. a comprehensive and continuous professional development program for secondary and higher education academic and vocational-technical faculty, counselors, other staff, and administrators involved in Tech-Prep programs; and k. a state guided method to identify and follow the progress and outcomes of Tech-Prep students throughout the program.	9. The Tech-Prep consortium will inform the QWFPC about its methods for student follow-up certifying for employers the competency attainments of its Tech-Prep participants. 10. The QWFPC will highlight Tech-Prep achievements in promotional materials; advocate employment advantages be extended to Tech-Prep participants; provide technical assistance to the Tech-Prep consortium for resource sharing among educational institutions and business; and will promote the adoption of effective education and training methods. 11. Agreements for cooperation and coordination between Tech-Prep consortia and QWFPCs do not dissolve the contractual obligations of each fiscal agent.

Topics	Quality Work Force Planning Committees	Tech-Prep Consortia
Geographic scope	Statewide One committee in each of the Governor's 24 state planning regions	25 currently funded regional consortia
Legal status	Committees established by the 71st Texas Legislature in 1989	Consortia formed in response to a competitive request for proposals in 1991-1992 and supplementary funding in 1992-1993.
Statutory citation	Texas Education Code, §21.115	Carl D. Perkins Vocational and Applied Technology Education Act, PL 101-392, Title III, Part E Texas Education Code, §§21.113, 31.40, 61.051(e&f), 61.057, 61.062, 130.0011, 135.01, and 135.04
Rules/guidelines	19 TAC Chapter 78, Subchapter B, *Quality Work Force Planning.* Approved by the State Board of Education, the Texas Higher Education Coordinating Board, and the State Job Training Coordinating Council; effective September 1, 1990.	*Tech-Prep High School and Associate of Applied Science Degree Programs: Guidelines for Development and Implementation;* and *Technical Education Program Guidelines* (effective 9-1-92 for public higher education institutions). Jointly developed by the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce; effective March 1, 1992.
Funding status	Biennial Appropriations from the 72nd Texas Legislature. Committees submit annual applications for funds.	Federal discretionary funds from the U.S. Congress. Consortia submit annual applications for funds for maximum of 5 years.
State-level fiscal agent	Texas Education Agency	Texas Higher Education Coordinating Board
Tri-Agency Partnership	Texas Education Agency Texas Higher Education Coordinating Board Texas Department of Commerce	Texas Education Agency Texas Higher Education Coordinating Board Texas Department of Commerce
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APPENDIX F

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